



# East Central Phoenix Water Quality Assurance Revolving Fund (WQARF) Sites

24th Street and Grand Canal, 32nd Street and Indian School Road,  
38<sup>th</sup> Street and Indian School Road, 40th Street and Osborn Road,  
and 48th Street and Indian School Road, Phoenix, Arizona

## Community Involvement Plan



January 2022

ADEQ Document No. EQR-22-02

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Acronyms and Glossary of Terms

**Disclaimer:** All telephone numbers, email addresses, and contact names are subject to change after the date of this publication.

## Community Involvement Plan – Introduction

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The Arizona Department of Environmental Quality (ADEQ) is committed to involving citizens in the cleanup of contaminated sites in Arizona per the Water Quality Assurance Revolving Fund (WQARF) program. Created under the Environmental Quality Act of 1986 to support hazardous substance cleanup efforts in the state, WQARF receives funding from legislative appropriations, cost recovery from responsible parties and special fees.

The WQARF program identifies sites that are in significant need of remediation. Sites added to the WQARF Registry receive primary consideration for the distribution of funds for investigation and cleanup. WQARF Registry sites are assigned an Eligibility and Evaluation (E&E) score based on several factors, such as the nature and extent of contamination and the number of people who may be exposed to the contaminants. The E&E score helps determine relative risk at the site, but does not necessarily mean that there is a direct risk to human health and/or the environment.

The East Central Phoenix community involvement area is located in east-central Phoenix, Arizona, and includes the 24th Street and Grand Canal, 32nd Street and Indian School Road, 38th Street and Indian School Road, 40th Street and Indian School Road, 40th Street and Osborn Road, and 48th Street and Indian School Road WQARF sites. Collectively these sites will be referred to as the East Central Phoenix WQARF sites. In 1987, the East Central Phoenix Study Area was designated as a WQARF Priority List site. In 1997, ADEQ established the WQARF Registry, which replaced the WQARF Priority List. From 1998 to 2000, the six East Central Phoenix sites were placed on the WQARF Registry.

- The 24th Street and Grand Canal site was placed on the WQARF Registry in May 2000 with an E&E score of 29 out of a possible 120.
- The 32nd Street and Indian School Road site was placed on the WQARF Registry in May 2000 with an E&E score of 29 out of a possible 120.
- The 38th Street and Indian School Road site was placed on the WQARF Registry in 1998 with an E&E score of 20 out of a possible 120. This site was delisted in June 2018 and relisted in December 2019.
- The 40th Street and Indian School Road site was placed on the WQARF Registry in 1998 with an E&E score of 20 out of a possible 120. This site was delisted in May 2017.
- The 40th Street and Osborn Road site was placed on the WQARF Registry in May 2000 with an E&E score of 30 out of a possible 120.
- The 48th Street and Indian School Road site was placed on the WQARF Registry in April 1999 with an E&E score of 27 out of a possible 120.

Arizona Revised Statutes (A.R.S.) § 49-287.03(B) and § 49-289.03, as well as Arizona Administrative Code (A.A.C.) R18-16-404, specify that a community involvement plan (CIP) be developed for each site before beginning the Remedial Investigation. Because the East Central Phoenix WQARF sites are located near each other, one CIP has been developed to encompass all six sites. The 38<sup>th</sup> Street and Indian School Road site and the 40<sup>th</sup> Street and Indian School Road site are not covered in detail in this CIP. Further information on those two delisted sites can be found on the ADEQ website, at the links shown on page four. The purpose of the CIP is to provide a meaningful process for two-way communication between ADEQ and the public in order to keep the

community informed about the progress of site investigations and remediation activities. The CIP will accomplish this goal using the following:

1. Ensure public access to project information in a timely manner;
2. Identify a Community Involvement Area (CIA) and provide opportunities for community members and other stakeholders to participate in the decision-making process associated with the environmental investigations and remediation of the sites;
3. Establish a Community Advisory Board (CAB);
4. Designate an ADEQ spokesperson; and
5. Develop a plan for distributing site information to residents within the sites' CIA.

This CIP will describe ADEQ's role and public participation opportunities regarding the WQARF process. ADEQ community involvement staff will review and update this plan on a regular basis taking into consideration site-specific developments, public health and environmental impacts, as well as public comments and community concerns. ADEQ also will solicit and consider CAB input to this CIP.

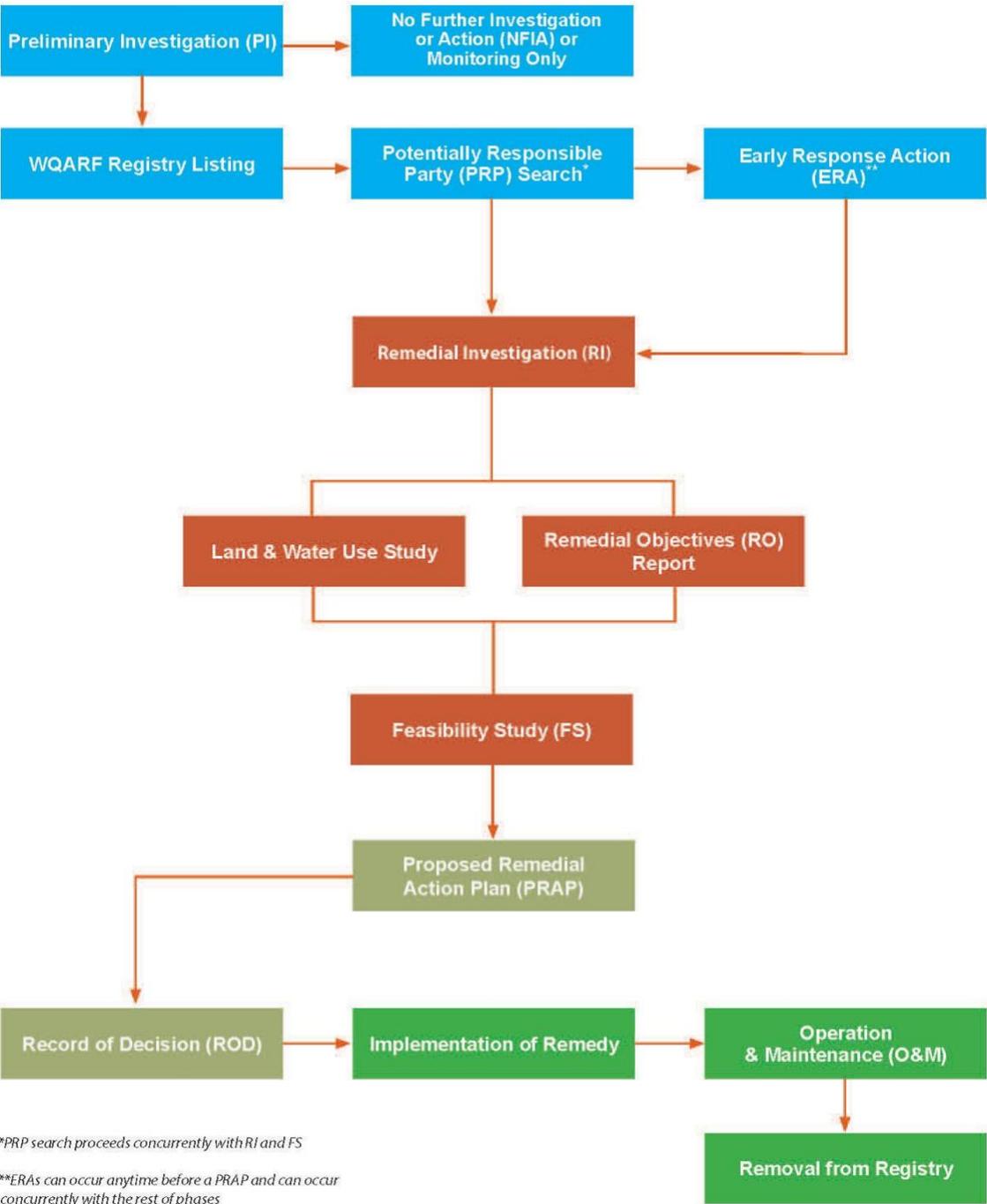
#### **A. WQARF Process**

The goal of the WQARF process is to clean up sites with groundwater and/or soil contamination as a means to protect human health and the environment. The WQARF process uses a step-by-step approach to thoroughly investigate contaminated sites and determine the best method for achieving site cleanup. The length of these processes and methods of cleanup vary for each WQARF site.

For sites with minimal risk to human health, cleanup may be achieved by restricting land or water use and allowing the contamination to dissipate naturally. For this method, groundwater or soil monitoring would occur to ensure that the contamination continues to decrease. For contaminated areas that may pose a risk to human health, cleanup methods may involve restricting land or water use, actively treating or filtering the groundwater to remove contamination, digging up any contaminated soil and removing it from the area, bioremediation/other in situ methods, or a combination of these actions.

The following flow chart depicts each phase in the WQARF process. Detailed definitions of each WQARF phase can be found in the glossary at the end of this CIP.

# WQARF PHASES



## B. Designated Spokesperson

A designated spokesperson will inform the public of upcoming events, ensure that the CIP is implemented according to schedule, and act as liaison between ADEQ and the community. Additionally, the spokesperson will determine methods for personal contact, arrange for the availability of a translator at meetings as needed, and coordinate the recording of presentations, when appropriate. Contact information for the designated spokesperson for this WQARF site is below:

**Community Involvement Coordinator**  
**ADEQ**  
1110 West Washington Street, 6<sup>th</sup> Floor  
Phoenix, AZ 85007  
(602) 292-0218  
Or  
(800) 234-5677  
Fax: (602) 771-4272  
View Community Involvement Contacts Online:  
<http://www.azdeq.gov/WQARF>

## C. Information Repository and Website

Information repositories of existing public documents pertaining to the East Central Phoenix WQARF sites are available for review both online and in person. Documents found in the repositories vary, but include WQARF Site Registry Reports, Remedial Investigation Reports, and Feasibility Study Reports, as well as site fact sheets, public notices, and meeting documents related to the WQARF sites. Technical documents relating to future milestones in the WQARF process will be made available to the public as they are completed. The information repositories for the sites can be found online or in person as shown below:

**Online**  
<https://azdeq.gov/ecp-24th-gc>  
<https://azdeq.gov/ecp-32nd-is>  
<https://azdeq.gov/ecp-38th-is>  
<https://azdeq.gov/ecp-40th-osborn>  
<https://azdeq.gov/ecp-48th-is>

**In Person**  
ADEQ Records Center  
1110 West Washington Street  
Phoenix, AZ 85007  
(602) 771-4380  
Or  
(800) 234-5677, Ext. 6027714380  
(Please call to make an appointment)

To make alternate arrangements to review documents in person at a location nearest you, contact the ADEQ Community Involvement Coordinator.

## Chapter 1 – Site Overview

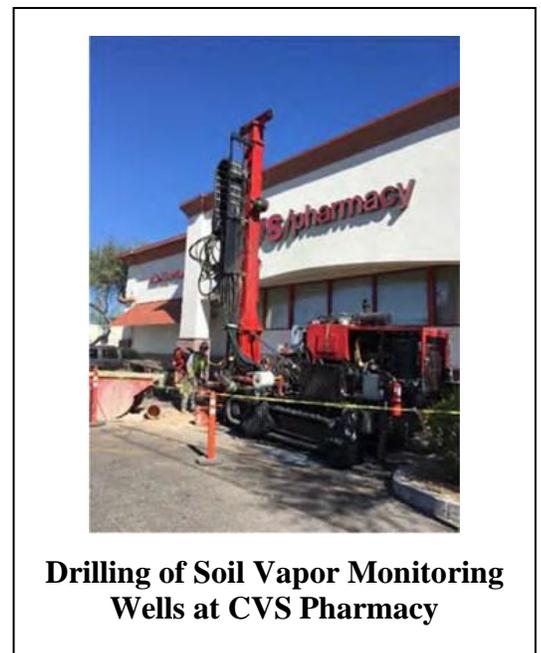
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### East Central Phoenix 24th Street and Grand Canal

The East Central Phoenix 24th Street and Grand Canal WQARF site contaminated groundwater plume is bounded approximately by East Pinchot Avenue to the north, East McDowell Road to the south, North 25<sup>th</sup> Street to the east and North Edgemere Street to the west. The East Central Phoenix 24th Street and Grand Canal site was placed on the WQARF Registry in May 2000 with an E&E score of 29 out of a possible 120. The major factor leading to the site's score was the presence of tetrachloroethene (PCE) in groundwater at levels exceeding Arizona Aquifer Water Quality Standards (AWQS). The primary contaminant of concern at the site is PCE.

In 2007, a remedial investigation was initiated at the site. During the remedial investigation, 16 groundwater monitoring wells and six soil vapor extraction wells were installed throughout the site. Design and implementation of a soil vapor extraction (SVE) remediation system was initiated as part of an early response action (ERA) in July 2016 near the CVS Pharmacy at the corner of 24th Street and Thomas Road.

The SVE system operated until August 2017. An in-situ chemical oxidation groundwater treatment pilot study was initiated at the CVS Pharmacy property in February 2020 is currently ongoing. The Proposed Remedial Action Plan (PRAP) was released in April 2020. ADEQ's current interpretation of the contaminated plume boundary is depicted on the map on page eight.



### East Central Phoenix 32nd Street and Indian School Road

The East Central Phoenix 32nd Street and Indian School Road WQARF site contaminated groundwater plume is bounded approximately by Indian School Road to the north, McDowell Road to the south, 32nd Street to the east, and 12th Street to the west. The East Central Phoenix 32nd Street and Indian School Road site was placed on the WQARF Registry in May 2000 with a score of 29 out of a possible 120. The major factor leading to the site's score was the presence of

PCE in groundwater at levels exceeding AWQS limits. The primary contaminants of concern at the site in groundwater are PCE and trichloroethene (TCE). No other contaminants of concern were detected above an AWQS during the most recent groundwater sampling event.

Numerous groundwater and soil vapor extraction wells have been installed throughout the site. SVE systems were operated intermittently at Maroney's Cleaners and Laundry Inc. (Maroney's) and Viking Cleaners (Viking) until 2018, when both were shut down. The SVE system at Maroney's resumed operation on an intermittent schedule in April 2020. Rebound evaluations continue at Maroney's to determine the need for continued operation. An enhanced reductive dechlorination groundwater treatment pilot study was initiated in February 2020 and is currently ongoing. The PRAP was released in September 2020. ADEQ's current interpretation of the contaminated plume boundary is shown on the map on page eight.



### **East Central Phoenix 38th Street and Indian School Road**

The East Central Phoenix 38th Street and Indian School Road WQARF site contaminated groundwater plume is bounded approximately by Monterosa Street to the north, Clarendon Avenue to the south, 38th Street to the east, and 34th Street to the west. The East Central Phoenix 38th Street and Indian School Road site was placed on the WQARF Registry in 1998 with a score of 20 out of a possible 120. The major factor leading to the site's score was the presence of PCE in groundwater at levels exceeding AWQS limits. The site contaminant of concern is PCE.

After three in-situ chemical oxidation injections, and subsequent groundwater sampling, in 2017 and 2018, the site was removed from the WQARF Registry in 2018. In 2019 additional groundwater sampling indicated the continued presence of PCE above AWQS, so the site was re-opened on the WQARF Registry in December, 2019.

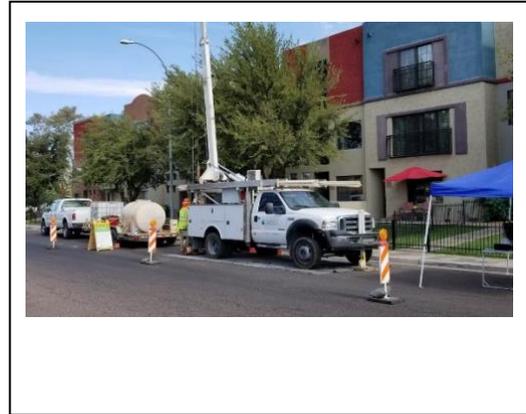
Since 2019 ADEQ has installed additional groundwater monitoring wells and resumed regular groundwater monitoring. A Feasibility Study is expected to be completed in 2022. ADEQ's current interpretation of the contaminated plume boundary is shown on the map on page eight.

### **East Central Phoenix 40th Street and Osborn Road**

The East Central Phoenix 40th Street and Osborn Road WQARF site contaminated groundwater plume is located in the 3900 block of North 40th Street near the intersection of Osborn Road. The site is bounded by East Fairmount Avenue to the north, East Hubbell Street to the south, 42nd Street to the east, and 25th Street to the west. The East Central Phoenix 40th Street and Osborn Road site was placed on the WQARF Registry in May 2000 with a score of 30 out of a possible 120. The major factor leading to the site's score was the presence of PCE in groundwater at levels exceeding AWQS limits.

The groundwater contaminant of concern at the site is PCE. TCE was detected above the AWQS one time in November 1996, but it has not been detected at any other time before or after that event.

ADEQ has installed and sampled groundwater monitoring wells periodically since 2003. The Feasibility Study was released in July 2021. ADEQ's current interpretation of the contaminated plume boundary is shown on the map on page eight.



### **East Central Phoenix 48th Street and Indian School Road**

The East Central Phoenix 48th Street and Indian School Road WQARF site contaminated groundwater plume is bounded approximately by Devonshire Avenue to the north, Fairmount Avenue to the south, 48<sup>th</sup> Street to the east, and 45th Place to the west. The East Central Phoenix 48th Street and Indian School Road site was placed on the WQARF Registry in 1999 with a score of 27 out of a possible 120. The major factor leading to the site's score was the presence of PCE in groundwater at levels exceeding AWQS limits.

The groundwater contaminant of concern at the site is PCE.

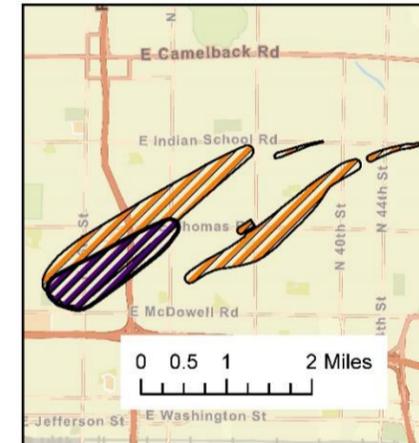
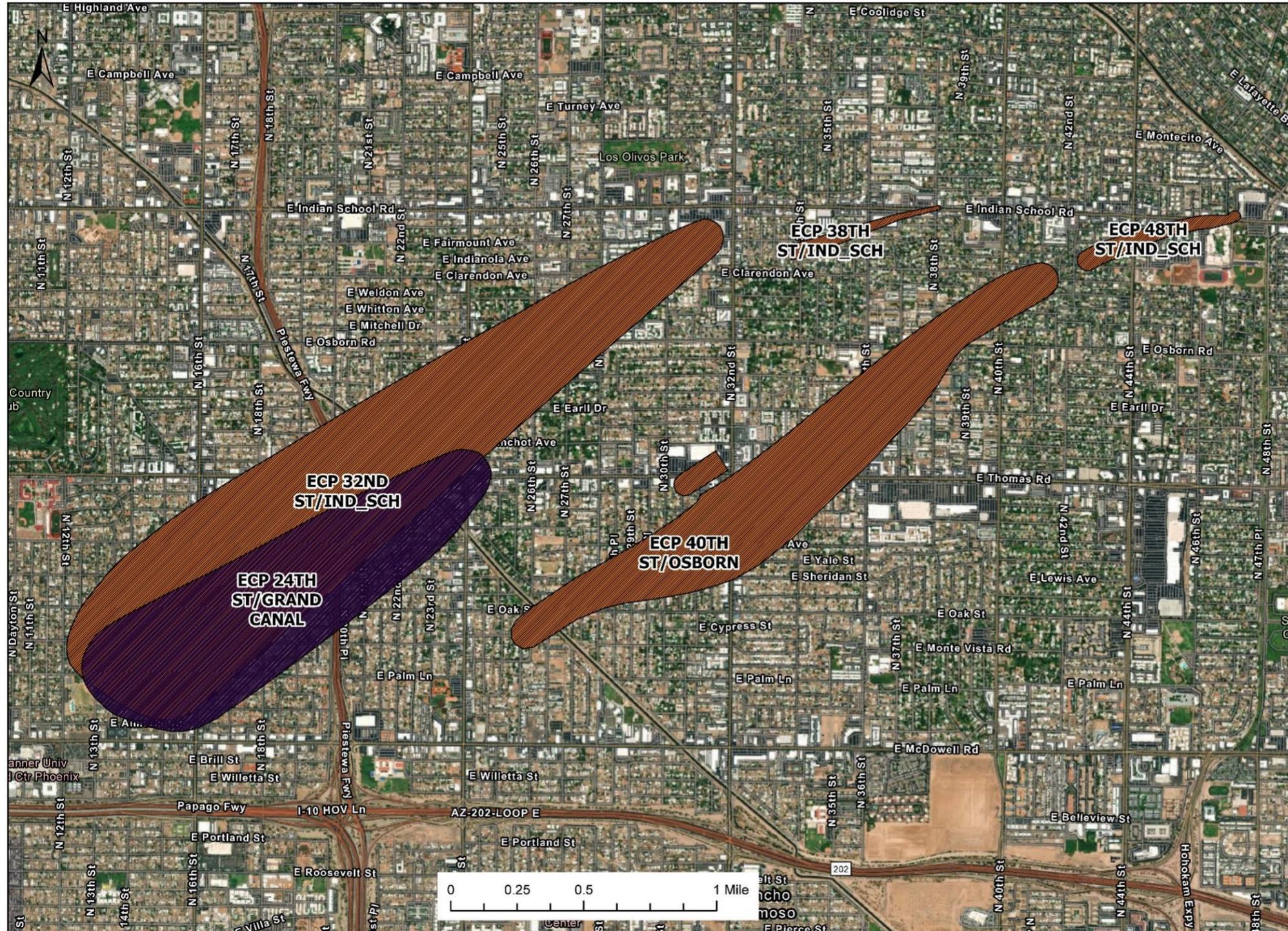


**Drilling at 48<sup>th</sup> Street and Indian School Road WQARF site**

From July 1, 2014, through June 30, 2015, 66 groundwater samples and 33 soil gas samples were collected. A deep groundwater monitoring well was installed at the source in April 2018. The Feasibility Study was completed in July 2020. ADEQ's current interpretation of the contaminated plume boundary is shown on the map on page eight.

For more detailed information about the history of the East Central Phoenix WQARF sites, please refer to Appendix A (Site Histories) of this CIP.

# East Central Phoenix WQARF Sites



- ECP 24TH ST/GRAND CANAL
- ECP 32ND ST/INDIAN SCHOOL RD
- ECP 38TH ST/INDIAN SCHOOL RD
- ECP 40TH ST/OSBORN RD
- ECP 48TH ST/INDIAN SCHOOL RD

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Plume boundaries depicted on the site map represent ADEQ's interpretation of data available at the time the map was constructed. The map is intended to provide the public with basic information as to the estimated geographic extent of known contamination as of the date of map production. The actual extent of contamination may be different. Therefore, the plume for this site may change in the future as new information becomes available.



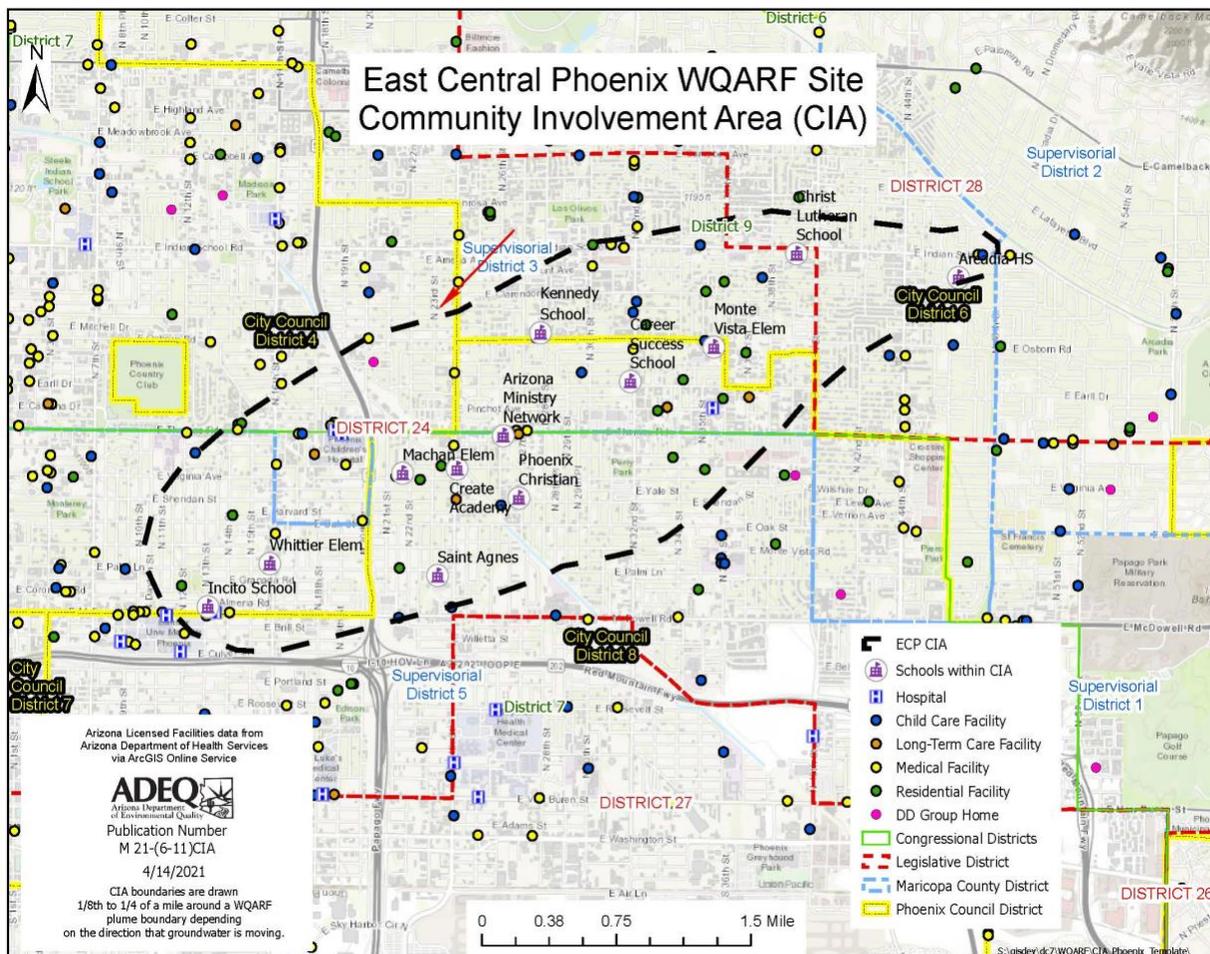
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# Chapter 2 – Community Profile

## A. Community Involvement Area

ADEQ has established a CIA for each site per A.R.S. § 49-289.02(A) and (B). A CIA is established to designate a geographic area to which mass mailings will be delivered. CIA boundaries are determined based on site-specific characteristics such as the affected media (i.e., soil, surface water, or groundwater), exposure routes, proximity to residential areas and public facilities, and level of community interest. The CIA may change as new information is received.

The map on the following page illustrates the 2021 CIA for the four active East Central Phoenix WQARF sites.



## **B. Community Demographics**

Community demographics help ADEQ plan and implement community involvement activities. As the most populated city in Arizona, Phoenix's population in 2021 is approximately 1.63 million people (as reported by the City of Phoenix). The community involvement area boundary for the East Central Phoenix WQARF sites contains portions of five zip codes (85014, 85006, 85008, 85016, and 85018) and is estimated to contain approximately 17,003 households. The East Central Phoenix WQARF sites are located within the boundaries of the City of Phoenix and consist of a mixture of commercial businesses and residential neighborhoods.

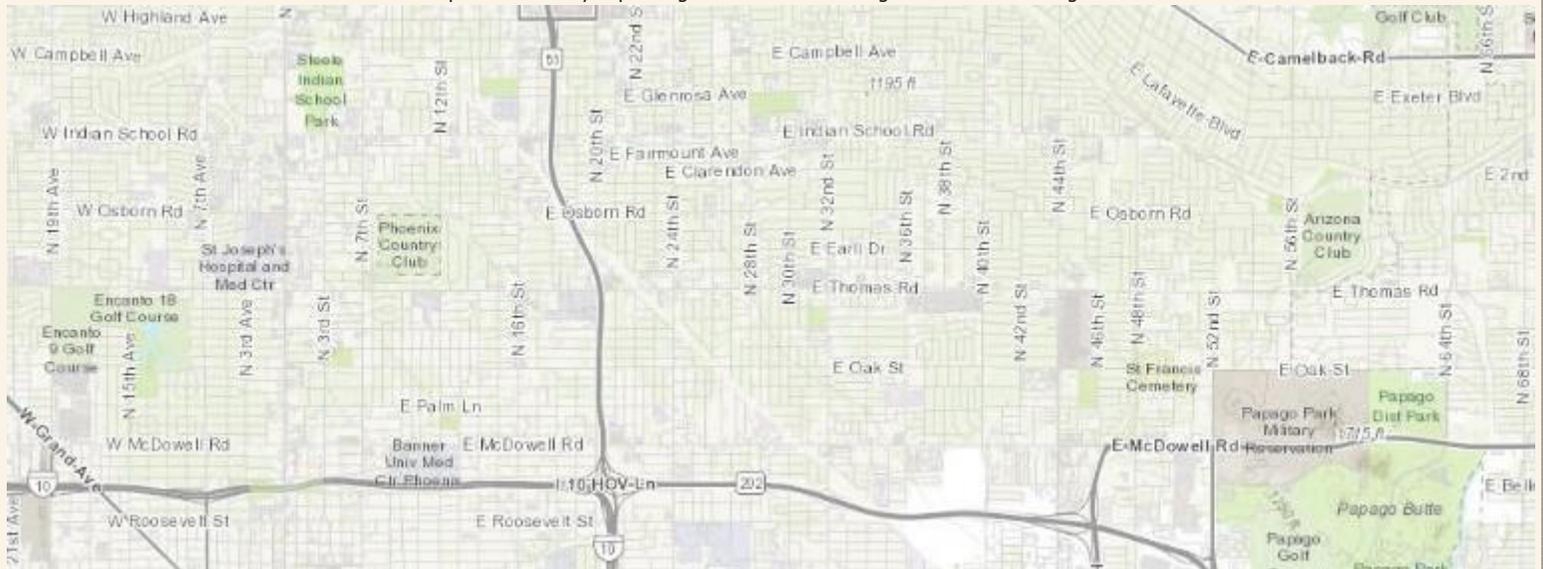
Residents identifying themselves as Hispanic or Latino within the East Central Phoenix WQARF sites community involvement area comprised 59.16% of the population, which is greater than the 30.7% average Hispanic and Latino population for the State of Arizona. This higher than average Hispanic and Latino population may indicate the need for Spanish translation services, which ADEQ will take into consideration along with community feedback and state guidelines.

ADEQ also looks at the community as a whole with an emphasis on the percentage of people who are unusually sensitive to contaminants. These people are those who are under the age of five or over the age of 65, as well as people with health issues. ADEQ will take reasonable measures to provide any needed language translation services as well as accommodations for individuals with disabilities.

The following page displays key demographic information for the East Central Phoenix CIA. For further demographic information regarding the CIA, please refer to the listing of neighborhood associations, community schools, and vulnerable population centers in Appendix B, and local and state elected officials in Appendix C.

# EAST CENTRAL PHOENIX -- PHOENIX, ARIZONA

Community Involvement Areas are drawn 1/8th to 1/4th of a mile around a WQARF plume boundary depending on the direction that groundwater is moving.



## Population and Households 2020



Total Population



Total Households



Average Persons per Household



Owner Occupied



Renter Occupied

## Vulnerable Population



Age 0-4



Age 65+

## Race and Ethnicity

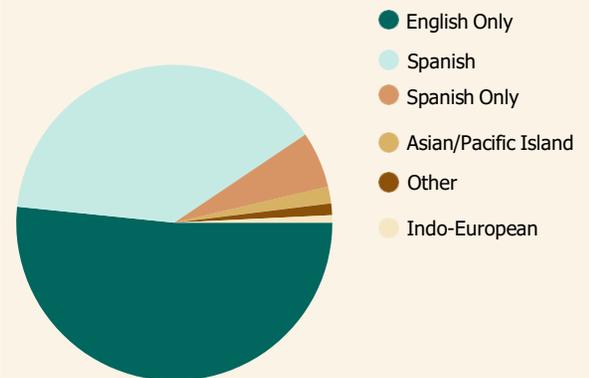
The largest group: Hispanic Origin (Any Race) (59.16)

The smallest group: Pacific Islander Alone (0.17)

Indicator ▲	Value	Diff
White Alone	56.87	-12.78
Black Alone	5.95	+1.09
American Indian/Alaska Native Alone	3.79	-0.79
Asian Alone	1.43	-2.19
Pacific Islander Alone	0.17	-0.05
Other Race	27.42	+14.35
Two or More Races	4.37	+0.36
Hispanic Origin (Any Race)	59.16	+26.98

Bars show deviation from Arizona

## Language Spoken Age 18-65



## 2020 Technology Access



87%

Have a smartphone



85%

Have access to Internet at home



41%

Own any tablet



61%

Household owns a computer

## Chapter 3 – Community Issues and Concerns

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In order to better understand the community and its concerns, ADEQ conducted online surveys with community and CAB members who have lived or worked in the area surrounding the East Central Phoenix WQARF sites. The CAB members are listed in Appendix D. The following is a summary of the common concerns of the interviewees involving the environment, health, and ADEQ outreach activities.

### A. Environmental and Health Concerns

Many of the community member interviewees were familiar with the East Central Phoenix WQARF sites. Most interviewees were concerned with the severity of the contamination and the length of remedial action activities. Specific environmental and health concerns expressed by the interviewees included wanting to make sure that the sites were remediated prior to needing to use the aquifer for drinking water, and concern that remediation of the sites is taking so long.

### B. Outreach and Other Concerns

Interviewees provided the following feedback and suggestions on current and future outreach pertaining to the East Central Phoenix WQARF sites:

- 75% of survey respondents felt that Community Advisory Board meetings are very effective.
- 50% of the survey respondents felt that ADEQ has been effectively communicating with the public about the site.
- Most of the respondents stated that the current electronic and U.S. mail communication methods in place by ADEQ were the best methods to share East Central Phoenix WQARF site updates.

### C. Response to Community Issues and Concerns

ADEQ uses the information gathered from community interviews, CAB and public meetings, and direct contact to ensure that future outreach activities and materials are able to address community questions and concerns as well as keep the community informed of WQARF site activities. Additionally, community feedback informs ADEQ outreach practices and allows the communication techniques noted in Chapter 4, Section B to be tailored to the specific needs of the community.

## Chapter 4 – Community Involvement Action Plan

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In addition to providing the framework for the state to investigate and clean up contaminated sites, the WQARF program also requires that ADEQ involve the community in the cleanup process. The following Community Involvement Action Summary table describes the required community involvement activities according to each WQARF phase and illustrates where the East Central Phoenix sites are in the WQARF process at the time of this writing. This summary is followed by a description of the communications vehicles and techniques available to use. Multiple techniques to communicate with and educate the public may be used throughout the process of remediating the WQARF sites.

### **A. Community Involvement Action Summary – Required Activities**

The following Community Involvement Action Summary table describes the required community involvement actions for the East Central Phoenix WQARF sites and notes what actions have been completed to date. The Community Involvement Action Summary table is color coded to match the WQARF process flow chart in the CIP Introduction.

**Community Involvement Action Summary**

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date <sup>1</sup>	Complete					
				24th Street and Grand Canal	32nd Street and Indian School Road	38th Street and Indian School Road	40th Street and Indian School Road	40th Street and Osborn Road	48th Street and Indian School Road
<b>Preliminary Investigation</b>	Provide owners and operators a copy of the Draft Water Quality Assurance Revolving Fund (WQARF) Site Registry Report for a 15-day comment period prior to publishing a notice in a newspaper announcing the availability of the Draft WQARF Site Registry Report for a 30-day public comment period.	A.R.S. § 49-287.01(C) A.R.S. § 49-289.03(A)(1)	<p>Mailing to owners and operators:</p> <ul style="list-style-type: none"> <li>- 24th Street and Grand Canal, May 2000</li> <li>- 32nd Street and Indian School Road, May 2000</li> <li>- 38th Street and Indian School Road, 1998</li> <li>- 40th Street and Indian School Road, 1998</li> <li>- 40th Street and Osborn Road, May 2000</li> <li>- 48th Street and Indian School Road, April 1999</li> </ul> <p>Public notice published in <i>Arizona Republic</i>:</p> <ul style="list-style-type: none"> <li>- 24th Street and Grand Canal, 2000</li> <li>- 32nd Street and Indian School Road, 2000</li> <li>- 38th Street and Indian School Road, 1998</li> <li>- 40th Street and Indian School Road, 1998</li> <li>- 40th Street and Osborn Road, 2000</li> <li>- 48th Street and Indian School Road, 1999</li> </ul>	✓	✓	✓	✓	✓	✓
<b>WQARF Registry Listing</b>	<p>Following the listing of a site on the WQARF Registry, ADEQ will:</p> <ul style="list-style-type: none"> <li>• Establish a preliminary Community Involvement Area (see Chapter 2, Section A) within 90 days of site listing on the WQARF Registry.</li> <li>• Provide written notice to the community on hazardous substance contamination in the area, the actual and potential risks and routes of exposure, possible health effects, and the opportunity to join the site mailing list.</li> <li>• Identify ADEQ personnel to contact for further information.</li> </ul>	A.R.S. § 49-289.02	<p>Notice to community and development of the East Central Phoenix WQARF sites Community Involvement Area, 1998</p> <p>Community Involvement Area updated in 2000, 2001, 2012, 2015, 2018 and 2020</p> <p>Notice of East Central Phoenix WQARF sites hazardous substance contamination, Spring 2003 and Summer 2007</p>	✓					

<sup>1</sup> Dates marked with an asterisk are approximate.

**Community Involvement Action Summary**

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date <sup>1</sup>	Complete						
				24th Street and Grand Canal	32nd Street and Indian School Road	38th Street and Indian School Road	40th Street and Indian School Road	40th Street and Osborn Road	48th Street and Indian School Road	
<b>WQARF Registry Listing (continued)</b>	Develop a Community Involvement Plan that establishes a Community Advisory Board, designates a spokesperson, provides for newsletters with current information about the status of remedial actions at the site, establishes a public document repository location, and provides for schedules of Community Advisory Board meetings and public meetings. Update the Community Involvement Plan at least every 2 years.	A.R.S. § 49-287.03(D) A.R.S. § 49-289.03(B) A.R.S. § 49-289.03(C) A.A.C. R18-16-404(C)(1)(i) A.A.C. R18-16-404(C)(1)(j) A.A.C. R18-16-404(C)(1)(k) A.A.C. R18-16-404(C)(1)(o)	Original East Central Phoenix Community Involvement Plan, 2008  Updated East Central Phoenix Community Involvement Plan, March 2013, October 2015, August 2016, 2018, December 2019 and January 2021.				✓			
<b>Early Response Action</b>	A work plan shall be prepared for each Early Response Action that will include a description of work to be done, known site conditions, a plan for conducting the work; a description of community involvement activities for the Early Response Action under R18-16-404; and a schedule.  Community involvement activities may include development of a community involvement plan under A.A.C. R18-16-404(C) or community involvement activities appropriate to the scope and schedule of the work performed such as a general public notice to those who may be impacted by field work as indicated in A.A.C. R18-16-404(D)(2).  If immediate action is necessary to address a current risk to public health or the environment, to protect a source of water, or to provide a supply of water, the work plan and written rationale may be prepared and the community involvement activities may be conducted after commencement of the Early Response Action.	A.A.C. R18-16-404 A.A.C. R18-16-405(D)(2) A.A.C. R18-16-405(E) A.A.C. R18-16-405(G)	Early Response Action activities:  - 24th Street and Grand Canal, 2015  - 32nd Street and Indian School Road, 2003, 2006, 2013, and 2015  - 38th Street and Indian School Road, 1995  - 40th Street and Indian School Road, 2003  - 40th Street and Osborn Road, None  - 48th Street and Indian School Road, 2000 (Interim Remedial Action), 2013 and 2014	✓	✓	✓	✓			✓

**Community Involvement Action Summary**

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date <sup>1</sup>	Complete					
				24th Street and Grand Canal	32nd Street and Indian School Road	38th Street and Indian School Road	40th Street and Indian School Road	40th Street and Osborn Road	48th Street and Indian School Road
<b>Remedial Investigation<sup>2</sup></b>	Provide notice to interested parties announcing the availability of the Remedial Investigation Scope of Work or Work Plan, Fact Sheet, and Community Involvement Plan Outline for review and a 30-day public comment period. Provide notice indicating that any person, by written agreement with ADEQ, may develop and implement a work plan for the Remedial Investigation and Feasibility Study and solicit information regarding the current and future land and water uses at the site. <sup>3</sup> These notices shall also provide an opportunity to request a public meeting.	A.R.S. § 49-287.03(B) A.R.S. § 49-287.03(C) A.A.C. R18-16-301(C) A.A.C. R18-16-403(F) A.A.C. R18-16-403(G) A.A.C. R18-16-404(C)(1)(a) A.A.C. R18-16-406(B) A.A.C. R18-16-406(D)	Combined East Central Phoenix WQARF sites notice, June 2007				✓		
	Establish a selection committee to choose Community Advisory Board members for the site. The selection committee shall consist of the following number of people from each organization: <ul style="list-style-type: none"> <li>• ADEQ: 1</li> <li>• Potentially Responsible Party: 1</li> <li>• Local Official: 1</li> <li>• Local Community: 2</li> </ul>	A.R.S. § 49-289.03(D)	East Central Phoenix WQARF sites Community Advisory Board selection committee established, November 2007				✓		
	Establish a Community Advisory Board of between 5 to 20 members that represent a diversified cross section of the community. Within 90 days of appointment by the Community Advisory Board selection committee, the Community Advisory Board shall elect co-chairpersons and develop a charter defining operating procedures, membership terms and obligations, goals for developing issues, concerns and opportunities related to quick cleanup of the site, and any other anticipated activities for identifying and improving the public's access and understanding of information regarding the remediation process at the site.	A.R.S. § 49-289.03(C) A.R.S. § 49-289.03(E) A.R.S. § 49-289.03(F)	East Central Phoenix WQARF sites Community Advisory Board established, March 2008				✓		

<sup>2</sup> A potentially responsible party search is conducted concurrently with the Remedial Investigation and Feasibility Study, but does not have mandated community involvement activities.

<sup>3</sup> Data collected from land and water use studies will be incorporated into the Remedial Investigation and/or Remedial Objectives Report per A.A.C. R18-16-406(D)-(I).

**Community Involvement Action Summary**

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date <sup>1</sup>	Complete					
				24th Street and Grand Canal	32nd Street and Indian School Road	38th Street and Indian School Road	40th Street and Indian School Road	40th Street and Osborn Road	48th Street and Indian School Road
<b>Remedial Investigation (continued)</b>	Publish a combined <sup>4</sup> public notice announcing the availability of the Draft Remedial Investigation Report for review and a minimum 30-day public comment period as well as hold a public meeting to solicit Remedial Objectives for the site. The public meeting shall be held not less than 45 calendar days and not more than 90 calendar days after release of the Draft Remedial Investigation Report, unless ADEQ sets a different date for good cause.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(b) A.A.C. R18-16-406(F) A.A.C. R18-16-406(I)(1) A.A.C. R18-16-406(I)(2)	Public notice and comment: <ul style="list-style-type: none"> <li>- 24th Street and Grand Canal, March 7, 2019</li> <li>- 32nd Street and Indian School Road, March 7, 2019</li> <li>- 38th Street and Indian School Road, December 18, 2014</li> <li>- 40th Street and Indian School Road, December 18, 2014</li> <li>- 40th Street and Osborn Road, December 18, 2014</li> <li>- 48th Street and Indian School Road, July 18, 2019</li> </ul>	✓	✓	✓	✓	✓	✓

<sup>4</sup>If not combined, separate public notices will be provided for the Draft Remedial Investigation comment period and the Remedial Objectives solicitation and public meeting.

**Community Involvement Action Summary**

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date <sup>1</sup>	Complete					
				24th Street and Grand Canal	32nd Street and Indian School Road	38th Street and Indian School Road	40th Street and Indian School Road	40th Street and Osborn Road	48th Street and Indian School Road
<b>Remedial Investigation (continued)</b>	<p>Publish a public notice announcing the availability of the Proposed Remedial Objectives Report for a 30-day public comment period.</p> <p>Publish a public notice of the availability of the Final Remedial Investigation Report, which shall contain the results of site characterization and the Final Remedial Objectives Report. The final Remedial Investigation Report shall be accompanied by responsiveness summaries regarding comments, issues and concerns raised in the community involvement process and, if the report is prepared by a person other than ADEQ, copies of the comments received.</p>	<p>A.A.C. R18-16-301(C)                      A.A.C. R18-16-404(C)(1)(c)                      A.A.C. R18-16-406(I)(5)                      A.A.C. R18-16-406(J)</p>	<p>Proposed Remedial Objectives Report public notice and comment:</p> <ul style="list-style-type: none"> <li>- 24<sup>th</sup> Street and Grand Canal, May 31, 2019</li> <li>- 32nd Street and Indian School Road, May 31, 2019</li> <li>- 38th Street and Indian School Road, February 26, 2015</li> <li>- 40th Street and Indian School Road, February 26, 2015</li> <li>- 40th Street and Osborn Road, February 26, 2015</li> <li>- 48th Street and Indian School Road, September 26, 2019</li> </ul> <p>Final Remedial Investigation Report public notice:</p> <ul style="list-style-type: none"> <li>- 24th Street and Grand Canal, June 27, 2019</li> <li>- 32nd Street and Indian School Road, June 27, 2019</li> <li>- 38th Street and Indian School Road, May 14, 2015</li> <li>- 40th Street and Indian School Road, May 14, 2015</li> <li>- 40th Street and Osborn Road, July 16, 2020</li> <li>- 48th Street and Indian School Road, November 28, 2019</li> </ul>	✓	✓	✓	✓	✓	✓

**Community Involvement Action Summary**

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date <sup>1</sup>	Complete					
				24th Street and Grand Canal	32nd Street and Indian School Road	38th Street and Indian School Road	40th Street and Indian School Road	40th Street and Osborn Road	48th Street and Indian School Road
<b>Feasibility Study</b>	Provide notice to interested parties announcing the availability of the Feasibility Study Work Plan  <i>Although not mandated, ADEQ will also provide public notice upon completion of the Feasibility Study.</i>	A.A.C. R18-16-404(C)(1)(d) A.A.C. R18-16-407(B)	<p>Feasibility Study Work Plan public notice:</p> <ul style="list-style-type: none"> <li>- 24th Street and Grand Canal, June 27, 2019</li> <li>- 32nd Street and Indian School Road, June 27, 2019</li> <li>- 38th Street and Indian School Road, May 14, 2015</li> <li>- 40th Street and Indian School Road, May 14, 2015</li> <li>- 40th Street and Osborn Road, July 16, 2020</li> <li>- 48th Street and Indian School Road, November 28, 2019</li> </ul> <p>Feasibility Study public notice:</p> <ul style="list-style-type: none"> <li>- 24th Street and Grand Canal December 12, 2019</li> <li>- 32nd Street and Indian School Road, December 12, 2019</li> <li>- 38th Street and Indian School Road, June 28, 2018</li> <li>- 40th Street and Indian School Road, June 15, 2017</li> <li>- 40th Street and Osborn Road, July 8, 2021</li> <li>- 48th Street and Indian School Road, July 9, 2020</li> </ul>	✓	✓	✓	✓	✓	✓

**Community Involvement Action Summary**

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date <sup>1</sup>	Complete					
				24th Street and Grand Canal	32nd Street and Indian School Road	38th Street and Indian School Road	40th Street and Indian School Road	40th Street and Osborn Road	48th Street and Indian School Road
<b>Proposed Remedial Action Plan</b>	Publish a public notice announcing the availability of the Proposed Remedial Action Plan for a 90-day public comment period. Mail the same notice to interested parties. The notice will describe the proposed remedy and its estimated cost and identify where the Proposed Remedial Action Plan, Remedial Investigation, and Feasibility Study Reports may be inspected.	A.R.S. § 49-287.04(B) A.R.S. § 49-289.03(A)(2) A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(e) A.A.C. R18-16-408(A)	Proposed Remedial Action Plan public notice  - 24th Street and Grand Canal, April 2, 2020 - 32nd Street and Indian School Road, September 3, 2020 - 38th Street and Indian School Road - 40th Street and Indian School Road - 40th Street and Osborn Road, to be determined - 48th Street and Indian School Road, to be determined	✓	✓				
<b>Record of Decision</b>	Publish a public notice announcing the availability of the Record of Decision and Responsiveness Summary for review.	A.R.S. § 49-287.04(G) A.A.C. R18-16-404(C)(1)(f) A.A.C. R18-16-410							
<b>Implementation of Remedy (Remedial Actions)</b>	Publish a public notice announcing a request for ADEQ to approve remedial actions at the site. The notice will provide the opportunity for a 30-day public comment period.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(h) A.A.C. R18-16-413							
	Provide notice to the public and interested parties of a request for ADEQ to waive a regulatory requirement (permit) to complete remedial actions.	A.R.S. § 49-290 A.A.C. R18-16-404(C)(1)(l)							
	Provide notice to the public that fieldwork conducted to remove contaminants of concern may result in noise, light, odor, dust or other adverse impacts.	A.A.C. R18-16-404(C)(1)(m)		✓	✓	✓		✓	✓

**Community Involvement Action Summary**

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date <sup>1</sup>	Complete					
				24th Street and Grand Canal	32nd Street and Indian School Road	38th Street and Indian School Road	40th Street and Indian School Road	40th Street and Osborn Road	48th Street and Indian School Road
<b>Implementation of Remedy (Remedial Actions) (continued)</b>	Provide notice to the public of a request for ADEQ to determine whether each of the Remedial Objectives for a site have been satisfied and will continue to be satisfied. The notice will provide the opportunity for a 30-day public comment period on the request.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(n) A.A.C. R18-16-416(B)							
<b>Operation &amp; Maintenance</b>	Publish a public notice announcing the availability of the Operation & Maintenance Plan for review, where the remedy or ERA involves treatment of water to remove contaminants of concern at the site, and a 30-day public comment period. Mail the same notice to interested parties.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(g) A.A.C. R18-16-411(E)							
<b>Removal from Registry</b>	<i>Although not mandated by Arizona statute or administrative code, ADEQ may publish a public notice upon the removal of the site from the WQARF Registry.</i>	Not applicable	- 38th Street and Indian School Road, June 28, 2018  - 40th Street and Indian School Road, June 15, 2017			✓	✓		

**Community Involvement Action Summary**

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date <sup>1</sup>	Complete					
				24th Street and Grand Canal	32nd Street and Indian School Road	38th Street and Indian School Road	40th Street and Indian School Road	40th Street and Osborn Road	48th Street and Indian School Road
Any Phase	Publish a public notice announcing a request to ADEQ for a prospective purchaser agreement. The notice will provide the opportunity for a 30-day public comment period.	A.R.S. § 49-289.03(A)(3) A.A.C. R18-16-301(C)	<p>24th Street and Grand Canal:</p> <ul style="list-style-type: none"> <li>- One prospective purchaser agreement notice was published in 2009 (see Appendix E).</li> </ul> <p>32nd Street and Indian School Road:</p> <ul style="list-style-type: none"> <li>- Two prospective purchaser agreement notices were published in 2000 and 2007 (see Appendix E).</li> </ul> <p>38th Street and Indian School Road:</p> <ul style="list-style-type: none"> <li>- One prospective purchaser agreement notice was published in 2000 (see Appendix E).</li> </ul> <p>40th Street and Indian School Road:</p> <ul style="list-style-type: none"> <li>- One prospective purchaser agreement notice was published in 1999 (see Appendix E).</li> </ul> <p>40th Street and Osborn Road:</p> <ul style="list-style-type: none"> <li>- No prospective purchaser agreement requests have been submitted to date.</li> </ul> <p>48th Street and Indian School Road:</p> <ul style="list-style-type: none"> <li>- One prospective purchaser agreement notice was published in 2007 (see Appendix E).</li> </ul>	✓	✓	✓	✓		✓

**Community Involvement Action Summary**

WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date <sup>1</sup>	Complete					
				24th Street and Grand Canal	32nd Street and Indian School Road	38th Street and Indian School Road	40th Street and Indian School Road	40th Street and Osborn Road	48th Street and Indian School Road
Any Phase	Publish a public notice announcing the intention of ADEQ to enter into a settlement agreement with a responsible party. The notice will provide the opportunity for a 30-day public comment period.	A.R.S. § 49-289.03(A)(4) A.A.C. R18-16-301(C)	<p>24th Street and Grand Canal:</p> <ul style="list-style-type: none"> <li>- No settlement agreement requests have been submitted to date.</li> </ul> <p>32nd Street and Indian School Road:</p> <ul style="list-style-type: none"> <li>- One consent decree settlement notice was published in 2002 (see Appendix F).</li> </ul> <p>38th Street and Indian School Road:</p> <ul style="list-style-type: none"> <li>- One consent decree settlement notice was published in 1998 (see Appendix F).</li> </ul> <p>40th Street and Indian School Road:</p> <ul style="list-style-type: none"> <li>- Two consent decree settlement notices were published in 1999 (see Appendix F).</li> </ul> <p>40th Street and Osborn Road:</p> <ul style="list-style-type: none"> <li>- No settlement agreement requests have been submitted to date.</li> </ul> <p>48th Street and Indian School Road:</p> <ul style="list-style-type: none"> <li>- No settlement agreement requests have been submitted to date.</li> </ul>		✓	✓	✓		

## **B. Community Involvement Action Summary – Communication Techniques**

As previously described in the Community Involvement Action Summary table, there are required communications activities for every phase of the WQARF process. This section describes the specific activities and resources that ADEQ uses and has available to communicate with, educate, and help the community and stakeholders be actively involved in the East Central Phoenix WQARF sites.

ADEQ will continue to use the following resources to keep stakeholders informed throughout the process:

1. **CAB** – The CAB, with assistance from ADEQ, has been conducting public meetings about the East Central Phoenix WQARF sites since March 2008. CAB members advise ADEQ on appropriate means of delivering site information as well as provide input regarding content. CAB members also serve as an information resource for their community. CAB meetings are held at a location and date mutually agreed upon by the CAB members and an ADEQ representative. Care is taken to ensure that the location is easily accessible for the public to attend. For a list of current CAB members, see Appendix D.
2. **Local Print Media** – ADEQ will publish all WQARF milestone public notices in the *Arizona Business Gazette*, which has a search function for public notices (<http://archive.azcentral.com/class/azbjnotices.html>). For a list of other media outlets, see Appendix G.
3. **U.S. Mail and Email Lists** – ADEQ creates, maintains, and updates U.S. Mail and email address lists for each of the East Central Phoenix WQARF sites. Mailing list addresses are compiled and updated on an ongoing basis through CIP updates, as are return mailers from fact sheets, CABs, open houses, public meeting attendance lists; and other individual requests. These distribution lists include CAB members, local elected and appointed officials, neighborhood and home owner association contacts, schools and vulnerable population centers representing/located within the sites' CIAs (see Appendices B through D), as well as other interested parties.
4. **ADEQ Website** – ADEQ's website provides visitors with three areas of information related to the site and is updated on an ongoing basis:
  - Notices Page – The notices page provides information regarding WQARF site public notices and comment periods (<http://azdeq.gov/notices>). This information can also be found on the WQARF site information page.
  - Events Page – The events page provides information regarding WQARF site public meetings, including CAB meetings (<http://www.azdeq.gov/events>). This information can also be found on the WQARF site information page.

- Site Information Pages – These pages provide detailed site information and access to the online information repositories for the sites, which include milestone documents.
  - <https://azdeq.gov/ecp-24th-gc>
  - <https://azdeq.gov/ecp-32nd-is>
  - <https://azdeq.gov/ecp-38th-is>
  - <https://azdeq.gov/ecp-40th-osborn>
  - <https://azdeq.gov/ecp-48th-is>

5. **ADEQ Notice Board** – Notice boards are located in ADEQ’s Phoenix and Tucson offices.
6. **Public Meetings** – Public meetings or open houses, beyond the CAB meetings, may be scheduled and conducted as needed and as determined by ADEQ and the CAB (for example, meetings with neighborhood/homeowner’s associations, schools, or other community groups).
7. **Site Tours** – Tours of the sites can be requested and arranged in conjunction with the property owners and in compliance with current laws and regulations by contacting the ADEQ Community Involvement Coordinator.

The following table of Communication Techniques illustrates how these techniques have and will be used throughout the WQARF process for the East Central Phoenix WQARF sites.

Communication Techniques							
Communications Deliverable			Communications Recipients/Methods				
Type <sup>5</sup>	Why	When	CAB Members	Interested Parties List	ADEQ Website	Local Print Media	ADEQ Notice Board
Notice	Provide notice of availability of milestone documents, request comments, and solicit input.	Per mandate (see Community Involvement Action Summary table).	✓	✓	✓ (Site and calendar pages)	✓ ( <i>Arizona Business Gazette</i> )	✓
CAB or Public Meeting Notice/Agenda	Provide two-way communication about the status of site activities. The notice announces the meeting and provides the agenda.	Variable schedule based on level of site activity as scheduled by CAB and ADEQ, with the exception of the required public meeting for the solicitation of remedial objectives (see Community Involvement Action Summary table).	✓	✓	✓ (Site and calendar pages)	Not applicable	✓
Technical Presentation	Provide current information about site activity or related topics.	At CAB meetings or at specially requested public meetings.	✓	Not applicable	✓ (Site page)	Not applicable	Not applicable
Technical Milestone Document	Provide current technical information about site investigation/remediation activities (e.g., Remedial Investigation, Feasibility Study, etc.).	According to the WQARF Process as documents are developed and become available.	✓	Not applicable	✓ (Online information repository)	Not applicable	Not applicable
Site Fact Sheet/Newsletter	Provide current information about site activity.	Published at the start of the Remedial Investigation and at specific milestones or other times as deemed appropriate by ADEQ and the CAB.	✓	✓	✓ (Online information repository)	Not applicable	Not applicable
Public Meeting to Solicit Remedial Objectives	Provide forum to solicit Remedial Objectives. (Note that this meeting may be conducted in conjunction with a CAB meeting.)	After release of the Draft Remedial Investigation Report.	✓	✓	✓ (Site and calendar pages)	✓ ( <i>Arizona Business Gazette</i> )	✓
Public notice announcing a request to ADEQ for a prospective purchaser agreement	Provide notice of availability and request comments.	Per mandate (see Community Involvement Action Summary table).	✓	✓	✓ (Online information repository)	✓ (Newspaper of general circulation in Maricopa County)	Not applicable
Public notice announcing the intention of ADEQ to enter into a settlement agreement with a responsible party.	Provide notice of availability and request comments.	Per mandate (see Community Involvement Action Summary table).	✓	✓	✓ (Online information repository)	✓ (Newspaper of general circulation in Maricopa County)	Not applicable
Site Tour	Provide walking or driving tour of the site to observe current site conditions and the surrounding community and environment.	If requested, and with cooperation of current property owners.	Contact ADEQ Community Involvement Coordinator.				

<sup>5</sup> Communications deliverables may be translated into Spanish if deemed necessary or requested.

## C. Other Resources and Contacts

In addition to the designated spokesperson and information repositories identified at the beginning of this CIP, the appendices included in this CIP provide additional resources and contact information for the public to use as desired.

- **Appendix A** provides a history of major activities by year at the East Central Phoenix WQARF sites.
- **Appendix B** provides a list of targeted communities in the East Central Phoenix WQARF sites CIA. These include neighborhood associations, as well as community schools, and vulnerable population centers.
- **Appendix C** provides a table of local and state elected officials, by district, who represent communities within the CIA. Note that some districts may encompass more of the community involvement area than others.
- **Appendix D** provides a table of the current East Central Phoenix WQARF sites CAB members.
- **Appendix E** provides a list of parties that have requested, and received, from ADEQ prospective purchaser agreements for property in and around the East Central Phoenix WQARF sites.
- **Appendix F** provides a list of parties that have consent decree settlements with ADEQ pertaining to the East Central Phoenix WQARF sites.
- **Appendix G** provides a list of media outlets in the area. All future public notices for the East Central Phoenix WQARF sites can be found by searching the *Arizona Business Gazette* publication (<http://archive.azcentral.com/class/azbjnotices.html>).
- **Appendix H** provides a list of other related state and local agencies that may be of interest to the public.

## Appendix A – Site Histories

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The following presents site histories in chronological order for the Arizona Department of Environmental Quality (ADEQ) East Central Phoenix Water Quality Assurance Revolving Fund (WQARF) sites.

### East Central Phoenix 24th Street and Grand Canal

- 1985–1998 Groundwater samples were collected by the Salt River Project (SRP) from well 16.0E-6.8N, located east of the 24th Street and Grand Canal intersection. A sampling event conducted in January 1995 yielded the highest detection of tetrachloroethene (PCE) yet observed in the SRP well, a concentration of 8.8 micrograms per liter ( $\mu\text{g/L}$ ).
- 2000 In May, the 24th Street and Grand Canal site was placed on the WQARF Registry with a score of 29 out of a possible 120. Groundwater sample collection from SRP well 16.0E-6.8N has generally been conducted by ADEQ on a yearly basis with levels of PCE above the Arizona Aquifer Water Quality Standards (AWQS) of 5  $\mu\text{g/L}$ .
- 2002–2006 Routine groundwater monitoring activities were conducted at the site by ADEQ. The PCE concentration in SRP well 16.0E-6.8N ranged from 7.9  $\mu\text{g/L}$  to 11  $\mu\text{g/L}$ .
- 2007 In June, ADEQ sent out notices per Arizona Revised Statute (A.R.S.) § 49-287.03 initiating the Remedial Investigation for the site. During a routine groundwater monitoring event, PCE was detected in SRP well 16.0E-6.8N at a concentration of 12  $\mu\text{g/L}$ .
- 2008 As part of a prospective purchaser agreement (PPA), CVS Pharmacy conducted a limited site assessment at the former location of a dry cleaner on the northeast corner of 24th Street and Thomas Road. As a condition of the PPA, CVS Pharmacy installed an on-site groundwater monitoring well located northeast of the North 24th Street and East Thomas Road intersection. The initial groundwater sample collected from the well had a PCE concentration of 170  $\mu\text{g/L}$ . CVS Pharmacy also conducted a soil and soil vapor survey to 85 feet below ground surface (bgs). PCE concentrations in soil ranged from less than the laboratory reporting limit to 0.20 milligrams per kilogram (mg/kg). The highest concentration of PCE detected in soil vapor was 2,000 parts per billion by volume from a sample collected at 50 feet bgs.



**Drilling of Groundwater Monitoring Well at CVS Pharmacy**

## East Central Phoenix 24th Street and Grand Canal (continued)

- 2008 During a routine groundwater monitoring event, PCE was detected in SRP well 16.0E-6.8N at a concentration of 12 µg/L. The groundwater monitoring well located on the CVS Pharmacy property was sampled at multiple depths. The PCE concentrations ranged from 230 to 260 µg/L.
- 2014 Five groundwater monitoring wells were installed at the 24th Street and Grand Canal WQARF site and 68 groundwater samples were retrieved.
- 2015 Five groundwater and four soil vapor monitoring wells were installed throughout the site. A total of 124 groundwater samples and 32 soil vapor samples were collected. A planned Draft Remedial Investigation (RI) Report was postponed due to insufficient data and the need for additional groundwater assessment.
- 2016 Design and implementation of a soil vapor extraction (SVE) remediation system was initiated as part of an early response action (ERA) at the corner of 24th Street and Thomas Road.
- 2017 The SVE system was shut down in August due to low contaminant mass yield and to perform a soil vapor rebound evaluation. No significant soil vapor rebound was observed and the system remained shut down.
- 2018 In February, three deep soil borings were advanced to assess contaminants in the deep vadose zone. PCE was not detected in samples collected from the borings. In June, two additional groundwater monitoring wells were installed to better define the downgradient extent of the plume. In October, Geosyntec performed a Human Health Risk Assessment for the site. The assessment indicated remaining contaminant concentrations in soil vapor do not pose an unacceptable risk to site receptors.
- 2019 A triple-nested monitoring well was installed to delineate the downgradient portion of the plume. The Draft RI Report was released in March. The Proposed Remedial Objectives (RO) Report was released in May. The Final RI Report and Feasibility Study (FS) Workplan were released in June. The Final FS Report was completed in September.
- 2020 An in-situ chemical oxidation (ISCO) groundwater treatment pilot study was initiated in February 2020. The Proposed Remedial Action Plan (PRAP) was released in April 2020.
- 2021 Two new triple-nested monitoring wells were installed in the downgradient portion of the plume. The ISCO groundwater treatment pilot study continued throughout the year.

## East Central Phoenix 32nd Street and Indian School Road

- 1989 Soil vapor surveys were conducted at multiple facilities throughout the East Central Phoenix Study Area to determine if a release of contaminants to the subsurface had occurred.
- 1989–1994 Two underground storage tanks were removed from former Unocal #6453 gas station located at 3201 East Indian School Road. During an investigation in 1994, a sample of the sludge from the western waste oil tank was analyzed and found to contain 68 mg/kg of PCE. Additionally, a soil sample collected from a depth of 12 feet bgs beneath the same tank contained 13 mg/kg of PCE.
- 1983–1998 Groundwater samples were collected by SRP from well 17.0E-8.0N, located southwest of 3201 East Indian School Road. A sampling event conducted in January 1996 yielded the highest detection of PCE observed in the SRP well at 82 µg/L.
- 2000 In May, the 32nd Street and Indian School Road site was placed on the WQARF Registry with a score of 29 out of a possible 120. In June, a limited Phase II investigation was conducted at the Maroney's Cleaners and Laundry Inc. (Maroney's) facility located at the northwest corner of 32nd Street and Indian School Road. The investigation included a soil vapor survey to 15 feet bgs and the installation and sampling of two groundwater monitoring wells. The highest concentration of PCE detected in soil vapor was 15,000 µg/L from a sample collected at 15 feet bgs in the alley just north of Maroney's. The highest detection of PCE in groundwater, 28 µg/L, was observed southwest of Maroney's in the parking area.
- 2003 In March, an ERA investigation was conducted at the former location of Viking Cleaners (Viking) at 4029 North 32nd Street. The ERA included completion of four soil borings (two inside and two outside the former dry-cleaning building) and the collection of soil vapor and groundwater samples. Results of this investigation indicated that a release of PCE had occurred and that the release had impacted groundwater. In April, air samples were collected from inside Viking building and the adjacent convenience mart. The Arizona Department of Health Services (ADHS) evaluated this data and provided a health consultation that determined there was no risk to employees under current use scenarios.
- During a routine groundwater monitoring event, PCE was detected in SRP well 17.0E-8.0N above the AWQS of 5 µg/L. The maximum PCE concentration observed was in a groundwater monitoring well west of the SRP well at 3,600 µg/L.
- 2004 An SVE/air sparge (AS) system was installed at Viking. ADEQ began operating the SVE/AS unit in December.
- During a routine groundwater monitoring event, PCE was detected in SRP well 17.0E-8.0N at a concentration of 4.6 µg/L, while the maximum PCE concentration observed in a groundwater monitoring well southwest of the SRP well was 12,900 µg/L.

## East Central Phoenix 32nd Street and Indian School Road (continued)

2006 Three additional groundwater monitoring wells were installed within the parking lot area surrounding Maroney's. The initial groundwater samples collected from the three wells indicated a maximum PCE concentration of 100 µg/L. Soil vapor samples collected during the monitoring well drilling had a maximum PCE concentration of 468 µg/L in one well at a depth of 5 feet bgs.

In the spring, as part of a PPA, the new property owner of the Viking property installed four SVE wells inside the facility. The wells were then connected to the SVE/AS system being operated by ADEQ. ADEQ installed a groundwater monitoring well located west of the building. The initial groundwater samples collected from the well had shallow and deep PCE concentrations of 2.9 and 2.7 µg/L, respectively.

During a routine groundwater monitoring event, PCE was detected in SRP well 17.0E-8.0N at a concentration of 5 µg/L, while the maximum PCE concentration observed in a groundwater monitoring well southwest of the SRP well was 930 µg/L.

2007 In May, a groundwater monitoring well was installed south of Maroney's. The initial groundwater samples collected from the well did not contain PCE above the AWQS. In June, ADEQ sent out notices per A.R.S. § 49-287.03 initiating the Remedial Investigation for the site. The SVE/AS system located at Viking remained operational.

2008 The SVE/AS system at Viking removed approximately 3,020 pounds of PCE. Because this system allowed cleanup criteria to be met, the system was shut down and removed from the site. In June, ADEQ installed a second groundwater monitoring well west of Viking on East Fairmount Avenue. The initial groundwater samples collected from the well had shallow and deep PCE concentrations that ranged from 32 to 2,400 µg/L.

ADEQ collected passive soil vapor samples from 40 locations placed within one city block west to southwest of Viking. The qualitative PCE mass observed in those samples ranged from less than 25 nanograms (ng) up to 66,800 ng.

During a routine groundwater monitoring event, PCE was not detected above the AWQS in SRP well 17.0E-8.0N.

## East Central Phoenix 32nd Street and Indian School Road (continued)

2010 ADEQ continued to collect passive soil gas samples from an additional 25 locations placed within one and a half city blocks west to southwest of the Viking facility. The qualitative PCE mass observed in those samples ranged from less than 25 ng to 546 ng. ADEQ also installed 21 permanent soil vapor monitoring wells along East Fairmount Avenue and North 31st Street. The initial soil vapor samples collected from these wells contained PCE and trichloroethene (TCE) concentrations ranging from less than the laboratory reporting limit to 36,000 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and  $210 \mu\text{g}/\text{m}^3$ , respectively.

During a routine groundwater monitoring event, PCE was not detected above the AWQS in SRP well 17.0E-8.0N.

2011 ADEQ installed five permanent soil vapor monitoring wells at the former location of Viking Cleaners. The initial soil vapor samples collected from these wells had PCE and TCE concentrations that ranged from less than the laboratory's reporting limit to  $350,000 \mu\text{g}/\text{m}^3$  and  $2,400 \mu\text{g}/\text{m}^3$ , respectively. ADEQ also installed two SVE test wells and ten SVE observation wells, and conducted an SVE pilot test. The results from the test suggest that SVE could be an effective treatment technology at the former location of Viking Cleaners.

In May, ADEQ installed a groundwater monitoring well west of Viking within the parking lot adjacent to Food City. The initial groundwater sample collected from the well contained PCE at a concentration of  $1,100 \mu\text{g}/\text{L}$ .

Based on the soil vapor sampling results in 2010 along East Fairmount Avenue and North 31st Street, ADEQ installed two SVE test wells and six SVE observation wells, and conducted SVE pilot tests in February and December. The results from the tests suggest that SVE may be an effective treatment technology along East Fairmount Avenue and North 31st Street.

In April, ten permanent soil vapor monitoring wells were installed north of Maroney's. The initial soil vapor samples collected from these wells contained PCE and TCE concentrations that ranged from less than the laboratory reporting limit to  $300,000 \mu\text{g}/\text{m}^3$  and  $3,800 \mu\text{g}/\text{m}^3$ , respectively. As a result, ADEQ conducted an SVE pilot test in June. The results from the test suggest that SVE may be an effective treatment technology at Maroney's.

During a routine groundwater monitoring event, PCE was not detected above the AWQS in SRP well 17.0E-8.0N.

## East Central Phoenix 32nd Street and Indian School Road (continued)

2012

ADEQ installed three SVE wells at Viking in preparation for the installation of an SVE system. Eleven SVE wells and eight groundwater remediation pilot test wells were installed along East Fairmount Avenue and North 31st Street. An additional groundwater monitoring well was installed south of Fairmount Avenue on 30th Street.

By February, 12 SVE extraction wells and 10 SVE observation wells were installed in preparation for the installation of an SVE system near Maroney's.



During the spring, ADEQ conducted sampling of the soil vapor monitoring wells throughout the site. Cone Penetrometer Testing (CPT) was also performed throughout the site to investigate current hydrogeologic conditions. Additionally, a routine groundwater monitoring event was conducted.

2013

The SVE system at Maroney's began operation in June and operated continuously until November. Additionally, ADEQ installed soil vapor wells to help delineate the soil vapor plume along the eastern portion of North 32nd Street between East Indian School Road and East Glenrosa Avenue, and at the corner of East Indian School Road and North 31st Street. Soil vapor wells were also installed along the southern portion of the Viking facility.

Soil vapor samples showed concentrations of PCE varied significantly from location to location. PCE was detected in soil vapor at concentrations as high as 4,100  $\mu\text{g}/\text{m}^3$ . The results of soil vapor sampling delineated an area in which PCE concentrations exceeded vapor intrusion screening levels calculated from available EPA guidance. Based on this information, ADEQ went door-to-door to collect indoor air samples from residences located above the soil vapor plume to assess the potential for vapor intrusion. Sample results did not indicate a wide-spread vapor intrusion problem.

2014

Construction of the SVE system located behind the Viking facility was completed and activated in July 2014 and has been in continuous operation since that time.

A total of 13,075 pounds of volatile organic compounds (VOCs) were removed from the Maroney's SVE system. Additionally, 68 groundwater and 326 soil vapor samples were collected. Follow-up indoor air samples were also collected to further assess the potential for vapor intrusion.

**East Central Phoenix 32nd Street and Indian School Road (continued)**

2015 Four groundwater and five soil vapor monitoring wells were installed across the 32nd Street and Indian School WQARF site. A total of 117 pounds of VOCs were removed from the Maroney's and Viking SVE systems. The Maroney's SVE system was turned off due to low soil vapor concentrations. The Viking SVE system remains in operation. Additionally, 183 groundwater, 19 soil vapor, and 38 soil samples were collected.



2016 Several groundwater wells and borings were installed to further delineate the plume including VCMW-03B, 06B, 15-17, 20, and 22. A rebound evaluation and remediation optimization review was conducted for the Maroney's SVE system. The Viking SVE system operated for much of the year with only brief shutdown periods for maintenance and operational considerations. In December, the Arizona Department of Health Services (ADHS) published a Health Consultation and concluded that there is no inherent public health concern from subsurface PCE or TCE vapor concentrations.

2017 Groundwater well drilling continued in an effort to fully delineate the plume, including drilling of VCMW-08AR and VCMW-23. Additional SVE wells and vapor probes were installed to assist ongoing SVE operations at both the Maroney's and former Viking Cleaners facilities.

2018 Two additional wells, VCMW-24 and 26, were installed to delineate the downgradient extent of the plume. The SVE system at Maroney's was shut down for a rebound evaluation. Concentrations remained below the health-protective concentrations during the rebound evaluation period and the system was not restarted. In December, an additional soil vapor extraction well (SVE-10) was installed at the former Viking Cleaners facility.

2019 Rebound evaluations continued at both the Maroney's and Viking Cleaners SVE systems. The Draft RI Report was released in March. The Proposed RO Report was released in May. The Final RI Report and FS Workplan were released in June. The Final FS Report was completed in September.

2020 An enhanced reductive dechlorination (ERD) groundwater treatment pilot study was initiated in February 2020. The PRAP was released in September, 2020. Soil vapor extraction was performed intermittently at the former Maroney's property.

### **East Central Phoenix 32nd Street and Indian School Road (continued)**

2021 The ERD groundwater treatment pilot study continued throughout the year. Soil vapor extraction was performed intermittently at the former Maroney's property.

### **East Central Phoenix 38th Street and Indian School Road**

- 1989 Soil vapor surveys were conducted at multiple facilities throughout the East Central Phoenix Study Area to determine if a release of contaminants to the subsurface had occurred. ADEQ collected samples to 30 feet bgs at the former locations of The Cleaners of Phoenix, Inc. (The Cleaners) and Rose Formal Wear, Inc. (Rose Formal Wear) facilities located in the 3700 block of Indian School Road. One soil vapor sample was collected adjacent to each facility. The maximum concentrations of PCE detected in the soil vapor samples were 16,000 µg/L at The Cleaners and 400 µg/L at Rose Formal Wear.
- 1992 Eleven borings were drilled adjacent to The Cleaners. Analyses of soil samples collected from the boring indicated detectable concentrations of PCE, but at levels below regulatory standards. ADEQ installed three groundwater monitoring wells: one south, one east and one southwest of The Cleaners. The initial groundwater sample collected from the well directly south of The Cleaners had a PCE concentration of 34,000 µg/L.
- An additional eight soil borings were drilled adjacent to Rose Formal Wear. The soil concentrations of PCE were all less than the laboratory reporting limit of 0.020 mg/kg. ADEQ installed a groundwater monitoring well adjacent to Rose Formal Wear. The initial groundwater sample collected from the well had a PCE concentration of 350 µg/L.
- 1994 ADEQ installed a dual-nested groundwater monitoring well near the intersection of Amelia Avenue and 36th Street. The initial groundwater samples collected from the well had shallow and deep PCE concentrations of 5.8 µg/L and less than the AWQS of 5 µg/L, respectively. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 1,600 µg/L.
- 1995 ADEQ installed an SVE system located adjacent to The Cleaners. The SVE system became operational in July and ran periodically through the beginning of August. The SVE system was shut down to perform a soil vapor rebound test. By the end of August, the treatment system appeared to have reached the appropriate cleanup criteria and the system was shut down and removed from the site in 2003. The SVE system removed 7.7 pounds of VOCs.
- 1996 ADEQ collected confirmation soil and soil vapor samples from three borings to a depth of 30 feet bgs near The Cleaners. Analyses of soil samples indicated detectable concentrations of PCE, but at levels below regulatory standards. The soil vapor concentrations of PCE ranged from less than the laboratory limit to 140 µg/L. Based on the results, ADEQ concluded that the SVE system had reduced soil vapors in the vadose zone.

## East Central Phoenix 38th Street and Indian School Road (continued)

- 1996 During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 2,700 µg/L.
- 1997 ADEQ collected several groundwater samples from two borings located near The Cleaners and Rose Formal Wear. PCE in groundwater was detected in one boring, with concentrations ranging from less than the laboratory limit to 12.9 µg/L. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 1,700 µg/L.
- 1998 The 38th Street and Indian School site was placed on the WQARF Registry with a score of 20 out of a possible 120. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 2,500 µg/L.
- 2002 During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 180 µg/L.
- 2003 ADEQ removed the SVE system located adjacent to The Cleaners facility. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 12 µg/L.
- 2004–2006 Routine groundwater monitoring was conducted at the site. The maximum PCE concentrations observed throughout the site ranged from 8.0 µg/L to 38 µg/L.
- 2007 In June, ADEQ sent out notices per A.R.S. §49-287.03, initiating the Remedial Investigation for the site. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 37 µg/L.
- 2008 ADEQ installed an additional groundwater monitoring well located west of Rose Formal Wear. The initial groundwater samples from the new well were collected from multiple depths. PCE was not detected in the well above the AWQS of 5 µg/L. The results from this sampling event indicated that the vertical extent of the plume had been assessed in this area. ADEQ conducted groundwater sampling using passive diffusion bag samplers in the site monitoring wells. The maximum PCE concentration observed throughout the site was 98 µg/L.
- 2013-2014 From July 1, 2013 to June 30, 2014, eight groundwater monitoring wells were installed and 89 groundwater samples were retrieved.
- 2014-2015 From July 1, 2014, to June 30, 2015, 69 groundwater and three soil vapor samples were collected. The Remedial Investigation report and a Feasibility Study Work Plan were finalized. Additionally, the analytical results of soil vapor samples collected from borings around the former The Cleaners facility were compared to an attenuated industrial air screening level. The analytical results were found to be less than the attenuated screening level, indicating that PCE vapor intrusion did not currently pose an excess health risk at the former facility.

### **East Central Phoenix 38th Street and Indian School Road (continued)**

- 2016 ADEQ installed a groundwater monitoring well and groundwater monitoring was conducted at the site.
- 2017 ADEQ installed a groundwater monitoring well and groundwater monitoring was conducted at the site. Additionally, a series of ISCO injections were conducted at the site from October through the end of the year.
- 2018 ISCO injections initiated in the previous year were completed in February. ADEQ conducted a series of groundwater monitoring events to collect data regarding the efficacy of the ISCO injections. Analytical results from groundwater sampled during the events indicated that concentrations of PCE were below the AWQS of 5 µg/L and ADEQ issued a Feasibility Study Report recommending site closure. A public notice informing the site's stakeholders and community that the site had been removed from the WQARF registry was issued in June.
- 2019 ADEQ conducted groundwater monitoring in response to site stakeholder concern that the site was closed prematurely. Analytical results from sampled groundwater indicated that PCE concentrations had returned to levels exceeding the AWQS of 5 µg/L. ADEQ reopened the site for continued environmental investigation and remediation and installed four groundwater monitoring wells.
- 2020 ADEQ installed three groundwater monitoring wells and groundwater monitoring was conducted at the site.
- 2021 ADEQ installed three groundwater monitoring wells and groundwater monitoring was conducted at the site. Additionally, five triple-nested soil vapor monitoring wells were installed and sampled near former dry cleaners within the site.

### **East Central Phoenix 40th Street and Osborn Road**

- 1983–2002 Groundwater samples were collected by SRP from well 17.9E-7.5N, located west of the Osborn Road alignment and 40th Street. A sampling event, conducted in January 1998, yielded the highest detection of PCE yet observed in the SRP well, a concentration of 210 µg/L.
- 2000 In May, the 40th Street and Osborn Road site was placed on the WQARF Registry with a score of 30 out of a possible 120.

## East Central Phoenix 40th Street and Osborn Road (continued)

2003 ADEQ installed a groundwater monitoring well in the Osborn Road alignment between 39th Street and 40th Street. The initial groundwater sample collected from the well did not contain PCE above the AWQS of 5 µg/L. During a routine groundwater monitoring event, PCE was detected in SRP well 17.9E-7.5N at a concentration of 110 µg/L.

2005–2006 Routine groundwater monitoring was conducted at the site. PCE was detected in SRP well 17.9E-7.5N at concentrations of 41 µg/L and 28 µg/L.

2007 In June, ADEQ sent out notices per A.R.S. §49-287.03 initiating the Remedial Investigation for the site. During a routine groundwater monitoring event, PCE was detected in SRP well 17.9E-7.5 at a concentration of 24 µg/L.

In December, ADEQ installed an additional groundwater well on 39th Street north of Indian School Road. The initial groundwater samples collected from the well had depth-specific PCE results that ranged from less than the laboratory reporting limit up to 310 µg/L.



**Groundwater Monitoring Well Installation**

2008 In the spring and winter, ADEQ installed three additional groundwater monitoring wells: two east of 40th Street along Weldon and Whitton Avenues and one in the Osborn Road alignment between 39th Street and 40th Street. The initial groundwater samples collected from the wells contained PCE ranging from less than the laboratory reporting limit to 110 µg/L.

During a routine groundwater monitoring event, PCE was detected in SRP well 17.9E-7.5N at a concentration of 6.8 µg/L. The maximum PCE concentration observed throughout the site was 67 µg/L.

2014 ADEQ monitored SRP well 17.9E-7.5N and three nearby groundwater monitor wells in 2008. Sampling of the SRP well indicated a PCE concentration of 6.8 µg/L. The PCE results from the other wells ranged from below the AWQS of 5 µg/L to 67 µg/L. In FY 2014, a total of eight groundwater monitor wells were installed and a total of 99 groundwater samples were retrieved. A Draft RI Report was released in December. It was later placed on hold when it was determined further investigation was warranted.

### **East Central Phoenix 40th Street and Osborn Road (continued)**

- 2015 In fiscal year 2015, one groundwater monitor well was installed and a total of 98 groundwater samples were retrieved.
- 2016-2019 Additional groundwater monitor wells were installed to characterize the distribution of groundwater contamination at the site.
- 2020 The Draft RI Report was released in April 2020. The Proposed RO Report was released in June 2020. The Final RI Report and the FS Workplan were released in July 2020.
- 2021 The Feasibility Study was released in July 2021. Semi-annual groundwater monitoring continued in 2021.

### **East Central Phoenix 48th Street and Indian School Road**

- 1989 Soil vapor surveys were conducted at multiple facilities throughout the East Central Phoenix Study Area to determine if a release of contaminants to the subsurface had occurred. In October, one soil vapor sample was collected adjacent to the Sandy's Magic Touch Cleaners, Inc. (Sandy's) facility. The concentration of PCE detected in the soil vapor sample was 670 µg/L.
- 1992 Eight soil borings were drilled west of Sandy's and soil samples were collected. PCE in soil ranged from 0.024 mg/kg to 0.440 mg/kg. A wastewater sample was collected from a lint trap at Sandy's and found to contain PCE at 150 µg/L. ADEQ installed two groundwater monitoring wells: one west of Sandy's and one northwest of SRP well 19.0E-8.1N. The initial groundwater sample collected from the well west of Sandy's had a PCE concentration of 2,300 µg/L.
- 1994 One groundwater monitoring well was installed southwest of Sandy's on Arcadia High School grounds. The initial groundwater samples collected from the well did not contain PCE above the AWQS of 5 µg/L.
- During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 3,000 µg/L.
- 1996 Ten soil borings were drilled west of Sandy's and soil samples were collected. The soil concentrations of PCE ranged from 0.0011 mg/kg to 0.2 mg/kg. Soil vapor samples were also collected. A maximum PCE concentration of 5,600 µg/L was identified in one boring at a depth of 15 feet bgs.
- During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 4,000 µg/L.

### **East Central Phoenix 48th Street and Indian School Road (continued)**

- 1997–1998 ADHS evaluated the data collected in 1996 and provided three health consultations that determined there was no risk to Sandy’s employees under current use scenarios. In May, ADEQ collected grab groundwater samples from five wells. The PCE concentrations in the samples ranged from less than the laboratory reporting limit to over 2,500 µg/L. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 4,300 µg/L.
- 1999 In April, the 48th Street and Indian School Road site was placed on the WQARF Registry with a score of 27 out of a possible 120.
- 2000 ADEQ and SRP entered into a governmental services contract in which ADEQ funded SRP to conduct an interim remedial action (IRA) at the site. For the IRA, SRP would design and install an SVE system to remove soil vapor contamination from the subsurface.
- 2001 As part of the IRA, SRP installed two groundwater monitoring wells east of Sandy’s and one groundwater extraction well west of Sandy’s.
- 2004 SRP installed two SVE wells west of Sandy’s and Maricopa County approved an air quality permit for the SVE system.
- 2006 In February, SRP began operating the SVE system. By September, the SVE system had removed approximately 248 pounds of PCE from the vadose zone. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 98 µg/L.
- 2007 In June, ADEQ sent out notices per A.R.S. §49-287.03 initiating the Remedial Investigation for the site. At the end of September, approximately 295 pounds of PCE were removed from the vadose zone by the SVE system. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 100 µg/L.
- 2008 By the end of March, approximately 309 pounds of PCE were removed from the vadose zone by the SVE system. ADEQ installed two additional groundwater monitoring wells on 47th Street, north of Indian School Road. The initial groundwater samples collected from the wells contained PCE equal to or below the AWQS of 5 µg/L. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 33 µg/L.

## East Central Phoenix 48th Street and Indian School Road (continued)

- 2009 In January, ADEQ collected passive soil gas samples from approximately 14 locations near North 45th Place, south of Indian School Road. By July, the SVE System had removed approximately 310 pounds of PCE from the soil in the vadose zone. Routine groundwater monitoring was not conducted.
- 2010 SRP continued to operate the SVE system. As of June, approximately 314 pounds of PCE had been removed from the vadose zone soil. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 370  $\mu\text{g/L}$ .
- 2011 ADEQ continued to collect passive soil gas samples from 39 locations adjacent to Sandy's and near North 45th Place. The PCE mass observed in those samples ranged from less than 25 ng to 3,512 ng. As a result, ADEQ installed 12 permanent soil vapor monitoring wells adjacent to the passive soil gas sample locations. The initial soil vapor samples collected from these wells had PCE concentrations that ranged from 16  $\mu\text{g/m}^3$  to 59,000  $\mu\text{g/m}^3$ .
- SRP continued to operate the SVE system. As of December, approximately 319 pounds of PCE had been removed from the vadose zone soil. During a routine groundwater monitoring event, the maximum PCE concentration observed throughout the site was 1400  $\mu\text{g/L}$ .
- 2012 ADEQ installed seven SVE wells and six SVE observation wells adjacent to Sandy's in preparation for the modification to the SVE system. ADEQ also conducted an SVE pilot test. The results from the test suggested that SVE was still an effective treatment technology for the site. SRP decommissioned its SVE system in April and ADEQ managed the construction, operation, and maintenance of a new SVE treatment system.
- ADEQ installed three additional groundwater monitoring wells south and southwest of Sandy's and conducted sampling of the soil vapor monitoring wells throughout the site. CPT was also performed throughout the site to investigate current hydrogeologic conditions. A routine groundwater monitoring event was conducted in April.

## East Central Phoenix 48th Street and Indian School Road (continued)

- 2013 To further delineate the soil vapor plume, ADEQ collected soil vapor samples. The soil vapor samples were collected at depths of approximately 5 and 15 feet bgs. The soil vapor concentrations of PCE ranged from less than the limit of detection of 69  $\mu\text{g}/\text{m}^3$  to 830  $\mu\text{g}/\text{m}^3$ .
- ADEQ also installed 56 temporary soil vapor wells. The results of soil vapor sampling delineated the PCE soil vapor plume at concentrations greater than the residential indoor air screening level of 9.4  $\mu\text{g}/\text{m}^3$ . The soil vapor plume extended from the southwestern portion of the Arcadia Towne Center southwest to an area near 44<sup>th</sup> Place, between East Fairmount and East Indianola avenues.
- ADEQ then went door-to-door to collect indoor air samples from residences located above the soil vapor plume to assess the potential for vapor intrusion. Fourteen residences were sampled. Additionally, ADEQ collected indoor air samples from 30 classrooms at Arcadia High School.
- Only one of the 14 indoor air samples collected in the residential areas contained PCE at a concentration greater than the residential indoor air screening level of 9.4  $\mu\text{g}/\text{m}^3$ . After confirmation sampling, results indicated PCE was less than the screening level, indicating the original sample was affected by normal household activities. PCE was not detected in any of the indoor air samples collected at Arcadia High School greater than the screening level.
- 2014 Additional indoor air sampling was conducted. PCE was not detected in any indoor air samples at concentrations greater than their applicable screening levels.
- Groundwater monitoring and soil gas monitoring activities were conducted throughout the site.
- As part of the ERA, SRP operated an SVE system. By January 2012, approximately 319 pounds of PCE had been removed from the soil. In April the SVE system was dismantled by SRP in order for ADEQ to install a new system. It was anticipated that the new SVE system would be installed in 2015. Site investigation and groundwater well installation continued throughout FY15.
- 2015 Groundwater monitoring and soil gas monitoring activities were conducted throughout the site. A total of 66 groundwater and 33 soil vapor samples were collected.
- 2016 ADEQ conducted groundwater investigations to characterize the distribution of impacted groundwater at the site.
- 2018 A deep groundwater monitoring well was installed at the source in April.

- 2019 The Draft RI Report was released in July. The Proposed RO Report was released in September. The Final RI Report and FS Workplan were released in November.
- 2020/21 The FS Report was released in July 2020. Semi-annual groundwater monitoring continued in 2021.

## Appendix B – Targeted Communities

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### A. Neighborhood Associations

The following presents Phoenix registered neighborhood associations and their respective points of contact in the East Central Phoenix Water Quality Assurance Revolving Fund (WQARF) sites community involvement area:<sup>1</sup>

**Alvarado Neighborhood Association** (602) 791-6011  
Nick Capaznick [capaz@gmail.com](mailto:capaz@gmail.com)  
51 E. Monte Vista Rd., Phoenix AZ 85004

**Arcadia Camelback Mountain Neighborhood Association** (602) 697-5332  
Tristahn Schaub President [tristahns@acmna.org](mailto:tristahns@acmna.org)  
4340 E. Indian School Road, Phoenix, AZ 85018

**Arcadia Camelback Special Planning District** (602) 266-3500  
Craig Steblay [craig@acmna.org](mailto:craig@acmna.org)  
5539 E. Exeter Blvd., Phoenix, AZ 85018

**Arcadia Lite Block Watch** No phone number provided  
Ben Madsen [Madsen.benjamin@gmail.com](mailto:Madsen.benjamin@gmail.com)  
3321 E. Glenrosa Ave., Phoenix AZ 85018

**Arcadia Lite Neighborhood Association** No phone number provided  
Ben Madsen [Madsen.benjamin@gmail.com](mailto:Madsen.benjamin@gmail.com)  
3321 E. Glenrosa Ave., Phoenix AZ 85018

**Arcadia Osborn Neighborhood Association** (602) 684-3889  
Janelle Lowey  
4920 E. Osborn Rd., Phoenix, AZ 85018

**Brentwood Historic Block Watch** \\  
Diane Post  
3314 W. Missouri Ave., Phoenix, AZ 85017

**Can Do**  
Peter Drake [peter-drake@cox.net](mailto:peter-drake@cox.net)  
PO Box 44337, 85064- Phoenix, AZ 85034-4337

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<sup>1</sup> The City of Phoenix Neighborhood Associations website did not provide address information for all neighborhood association contacts.

## **A. Neighborhood Associations (Continued)**

### **Central City Precinct Phoenix Neighborhood Patrol**

Doreena Wiegert  
1902 S. 16th St., Phoenix, AZ 85034

(602) 495-5005

### **Coalition of East Phoenix**

Deborah Cookson  
5950 E. Orange Blossom Ln., Phoenix, AZ 85018

(480) 990-9555

[Tennis3@cox.net](mailto:Tennis3@cox.net)

### **Coronado Fight Back Southwest**

Dianne Brennan  
1329 E Granada Rd, Phoenix AZ 85006

[president@gcna.info](mailto:president@gcna.info)

### **Coronado Neighborhood Association**

Tom Wright  
PO Box 5195, Phoenix, AZ 85010

[president@greatercoronado.com](mailto:president@greatercoronado.com)

### **Country Club Park Historic District**

Ellen Edwards  
2611 N. 8th St., Phoenix AZ 85006

### **Creighton Square Block Watch**

Danita Rios

[riostradingllc@gmail.com](mailto:riostradingllc@gmail.com)

### **Dateland Neighborhood Association**

Harold Lively  
3428 E. Minnezona Ave., Phoenix, AZ 85018

(602) 955-3876

[georgethedog@q.com](mailto:georgethedog@q.com)

### **East Glenrosa Avenue**

Beatrice Kabab  
4535 E. Glenrosa Ave., Phoenix AZ 85018

(480) 620-4181

### **East Osborn Neighborhood Association**

Roger Pongratz  
2901 E. Pinchot Ave., Phoenix, AZ 85016

(602) 553-8996

[east.osborn.na@cox.net](mailto:east.osborn.na@cox.net)

## **A. Neighborhood Associations (Continued)**

### **Evans Churchill Community Assoc Block Watch**

Dorina Bustamante  
PO Box 1106, Phoenix AZ 85001-1136

(602)614-8727  
[dorinabustamante@gmail.com](mailto:dorinabustamante@gmail.com)

### **Evans Churchill Community Association**

Dorina Bustamante  
PO Box 1106, Phoenix AZ 85001-1136

(602)614-8727  
[dorinabustamante@gmail.com](mailto:dorinabustamante@gmail.com)

### **Garfield Neighborhood Block Watch**

Kimberly G. Moody, 1029 E Garfield St, Phoenix AZ 85006

(602) 642-1299

### **Garfield Organization Neighborhood Alliance**

Dana Johnson  
1029 E Garfield St., Phoenix, AZ 85006

[dana@alwunhouse.org](mailto:dana@alwunhouse.org)

### **Greater Cheery Lynn Neighborhood Association**

Heather Flynn  
1582 E. Cheery Lynn Rd., Phoenix, AZ 85014

(602) 561-2876  
[heatherflynn1@yahoo.com](mailto:heatherflynn1@yahoo.com)

### **Greater Cherry Lynn Block Watch**

Ted Cotton  
1509 E. Cheery Lynn Rd., Phoenix, AZ 85014

(602) 481-8583  
[cottonTed@gmail.com](mailto:cottonTed@gmail.com)

### **Greater Green Gables Neighborhood Association**

Abraham James  
2018 N. 23rd St., Phoenix, AZ 85006

(602) 275-1377

### **Green Gables Neighborhood Association**

Abraham James  
2018 N. 23<sup>rd</sup> St., Phoenix, AZ 85006

(602) 275-1377  
[abrahamj@cox.net](mailto:abrahamj@cox.net)

### **Historic Emerson North**

Joanie Crawley  
2525 N. Richland St., Phoenix, AZ 85006

(602) 262-2212

### **Linden 2 HOA**

Jackie Holtorf  
3604 N. 38th St., Apt 13, Phoenix, AZ 85018

(602) 956-0208

## **A. Neighborhood Associations (Continued)**

- Literacy Volunteers of Maricopa County** (602) 274-3430  
1616 East Indian School Road, Phoenix AZ 85016 [support@lvmc.net](mailto:support@lvmc.net)
- Loma Linda Neighborhood Association** (602) 390-4207  
Mac McDonald  
3818 N. 20<sup>th</sup> St., Phoenix, AZ 85016
- Mineral Canyon Block Watch** (602) 363-2575  
Domnick Eger [deger@cobercafe.net](mailto:deger@cobercafe.net)  
504 E Mineral Rd., Phoenix AZ 85402
- Mir Ra Image** (480) 580-7653  
Jadestorm Shamsid-deen [mirra.imagem@aol.com](mailto:mirra.imagem@aol.com)  
9307 S 51<sup>st</sup> Ave., Apt. 1169, Phoenix AZ 85339
- Mountain View Precinct Phoenix Neighborhood Patrol**  
Rick Sain [usshornet@msn.com](mailto:usshornet@msn.com)  
3612 E Coronado Rd., Phoenix AZ 85008
- Phoenix Communities United**  
Michael Angulo [michaelangulo@mac.com](mailto:michaelangulo@mac.com)  
801 N 2<sup>nd</sup> Ave., Phoenix AZ 85003
- Phoenix Community Alliance** (602) 682-6612  
Cyndy Gaughan [info@phoenixcommunityalliance.com](mailto:info@phoenixcommunityalliance.com)  
1 E. Washington St. #230  
Phoenix, AZ 85004
- Phoenix Homestead Association**  
Christine Phillips [phillips.christine@gmail.com](mailto:phillips.christine@gmail.com)
- Simpatica Acres Neighborhood Association** (602) 956-3285  
Bill Graham [dgrahams@cox.net](mailto:dgrahams@cox.net)  
4140 N. 41st Pl., Phoenix, AZ 85018
- Sutton Place Block Watch**  
Bill Martin  
2504 E. Osborn Rd., Phoenix, AZ 85016
- Tavan Neighborhood Association** (602) 326-9906  
Thomas Smith  
3434 N 45<sup>th</sup> Pl., Phoenix AZ 85018

## **A. Neighborhood Associations (Continued)**

### **Urban Phoenix Project**

Jessica Bueno  
PO Box 13553, Phoenix, AZ 85002

[board@urbanphoenixproject.org](mailto:board@urbanphoenixproject.org)

### **Wrong Side of the Canal**

David Pratt  
4131 N. 44th Pl., Phoenix, AZ 85018

(602) 840-0718  
[prattman@cox.net](mailto:prattman@cox.net)

## **B. Community Schools**

The East Central Phoenix WQARF sites community involvement area is within the Creighton Elementary School District, Phoenix Union High School District, and Scottsdale Unified Elementary and High School District. The following list presents the community schools in the East Central Phoenix WQARF sites community involvement area:

### **Arcadia High School**

4703 E. Indian School Rd., Phoenix, AZ 85018

(480) 484-6300

### **Arizona Academy of Science and Technology**

1875 N. Central Ave., Phoenix, AZ 85002

(602) 253-1199

### **Arizona School for the Arts**

1410 N. 3<sup>rd</sup> St., Phoenix, AZ 85004

(602) 257-1444

### **Career Success School -- Sage Campus**

3120 N. 32nd St., Phoenix, AZ 85018

(602) 955-0355

### **Christ Lutheran School**

3901 E. Indian School Rd., Phoenix, AZ 85018

(602) 957-7010

### **Compass Center**

3609 N. 27th St., Phoenix, AZ 85016

(602) 381-4660

### **Emerson Elementary School**

915 E. Palm Lane, Phoenix, AZ 85006

(602) 257-3853

### **Genesis Academy**

525 E. McDowell Rd., Phoenix, AZ 85004

(602) 254-8090

### **Larry C. Kennedy School**

2702 E. Osborn Rd., Phoenix, AZ 85016

(602) 381-6180

## **B. Community Schools (Continued)**

<b>Monte Vista Elementary School</b> 3501 E. Osborn Rd., Phoenix, AZ 85018	(602) 381-6140
<b>Phoenix Christian K-8 School</b> 2425 N. 26th St., Phoenix, AZ 85008	(602) 956-9330
<b>Ralph Waldo Emerson Elementary School</b> 915 E. Palm Ln., Phoenix, AZ 85006	(602) 257-3853
<b>Saint Agnes School</b> 2311 E. Palm Ln., Phoenix, AZ 85006	(602) 244-1451
<b>Summit High School</b> 728 E. McDowell Rd., Phoenix, AZ 85006	(602) 258-8959
<b>Tavan Elementary School</b> Margaret Serna, 4610 E. Osborn Rd., Phoenix, AZ 85018	(480) 484-3500 <a href="mailto:mserna@susd.org">mserna@susd.org</a>
<b>Villa Montessori – Weldon Campus</b> 2802 E Meadowbrook Ave., Phoenix, AZ 85016	(602) 955-2210
<b>Western Bible College (SAGU)</b> 2601 E. Thomas Rd., #210, Phoenix, AZ 85016	(602) 252-5527
<b>Whittier Elementary School</b> 2000 N. 16 <sup>th</sup> St, Phoenix, AZ 85006	(602) 257-3925
<b>William T. Machan Elementary School</b> 2140 E. Virginia Ave., Phoenix, AZ 85006	(602) 381-6120

## **C. Vulnerable Population Centers**

The following is a list of vulnerable population centers, including places such as child care and assisted living facilities, in the East Central Phoenix WQARF sites community involvement area:

<b>Arcadian Day School</b> 3120 E. Weldon Ave., Phoenix, AZ 85018	(602) 688-1748
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## **C. Vulnerable Population Centers (Continued)**

<b>Camelback Holistic Preschool</b> 3901 N. 32 <sup>nd</sup> St., Phoenix, AZ 85018	(602) 466-1085
<b>Christ Lutheran Preschool</b> 3901 E. Indian School Rd., Phoenix, AZ 85018	(602) 957-7010
<b>Desert Haven Care Center</b> 2645 E. Thomas Rd., Phoenix, AZ 85016	(602) 956-8000
<b>Desert Terrace Healthcare Center</b> 2509 N. 24th St., Phoenix, AZ 85008	(602) 273-1347
<b>Khalsa Montessori Primary School Inc.</b> 346 E. Coronado Rd., Phoenix, AZ 85004	(602) 252-2275
<b>Kreative Kampus Learning Center</b> 1729 E. Thomas Rd., Phoenix, AZ 85016	(602) 277-1441
<b>Little Explorers Learning Center 2 L.L.C.</b> 2846 E. Cheery Lynn Rd., Phoenix, AZ 85016	(602) 583-7855
<b>Nina's Family Child Care Center</b> 3502 E. Indian School Road, Phoenix, AZ 85018	(602) 335-8951
<b>Secure Childcare</b> 1216 E. Windsor Ave., Phoenix, AZ 85006	(602) 348-5922
<b>St. Agnes Preschool</b> 2311 E. Palm Lane, Phoenix, AZ 85006	(602) 244-1451
<b>The Son's Children</b> 3301 N. 32 <sup>nd</sup> St., Phoenix, AZ 85018	(602) 956-7370
<b>Tutor Time Child Care / Learning Centers</b> 4736 E. Indian School Rd., Phoenix, AZ 85018	(602) 956-1020
<b>Tutor Time Child Care / Learning Centers</b> 725 E. Brill St., Phoenix, AZ 85006	(602) 254-2201

## **Appendix C – Local and State Elected Officials**

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As of the publication of this community involvement plan, the community involvement area for the East Central Phoenix Water Quality Assurance Revolving Fund sites falls under Phoenix City Council Districts 4, 6 and 8; Maricopa County Supervisorial Districts 2, 3 and 5; and Arizona Legislature Districts 24 and 28.

<b>CITY Officials</b>	<b>COUNTY Supervisors</b>	<b>STATE Representatives</b>	<b>STATE Senators</b>
<p>City Hall 200 W. Washington St. Phoenix, AZ 85003 (602) 262-6011</p>	<p>Maricopa County 301 W. Jefferson St. 10<sup>th</sup> Floor Phoenix, AZ 85003 (602) 506-3415</p>	<p>Arizona House of Representatives Capitol Complex 1700 W. Washington St. Phoenix, AZ 85007 (602) 926-4221</p>	<p>Arizona State Senate Capitol Complex 1700 W. Washington St. Phoenix, AZ 85007 (602) 926-3559</p>
<p><b>Mayor</b> City of Phoenix <b>Kate Gallego</b></p> <p>(602) 262-7111 Mayor.gallego@phoenix.gov</p>	<p><b>County Supervisor</b> District 2 <b>Thomas Galvin</b></p> <p>(602) 506-3415 <a href="mailto:district2@mail.maricopa.gov">district2@mail.maricopa.gov</a></p>	<p><b>Representative</b> District 24 <b>Jennifer Longdon</b></p> <p>Room #321 (602) 926-3264 <a href="mailto:jlongdon@azleg.gov">jlongdon@azleg.gov</a></p>	<p><b>Senator</b> District 24 <b>Lela Alston</b></p> <p>Room #311 (602) 926-5829 <a href="mailto:lalston@azleg.gov">lalston@azleg.gov</a></p>
<p><b>Phoenix City Vice Mayor</b></p> <p>District 4 <b>Laura Pastor</b></p> <p>(602) 262-7447 <a href="mailto:council.district.4@phoenix.gov">council.district.4@phoenix.gov</a></p>	<p><b>County Supervisor</b> District 3 <b>Bill Gates</b></p> <p>(602) 506-7562 <a href="mailto:district3@mail.maricopa.gov">district3@mail.maricopa.gov</a></p>	<p><b>Representative</b> District 24 <b>Amish Shah</b></p> <p>Room #123 (602) 926-3280 <a href="mailto:ashah@azleg.gov">ashah@azleg.gov</a></p>	<p><b>Senator</b> District 28 <b>Christine Marsh</b></p> <p>Room #311 (602) 926-3184 <a href="mailto:cmarsh@azleg.gov">cmarsh@azleg.gov</a></p>
<p><b>Phoenix City Council Member</b> District 6 <b>Sal DiCiccio</b></p> <p>(602) 262-7491 <a href="mailto:council.district.6@phoenix.gov">council.district.6@phoenix.gov</a></p>	<p><b>County Supervisor</b> District 5 <b>Steve Gallardo</b></p> <p>(602) 506-7092 <a href="mailto:district5@mail.maricopa.gov">district5@mail.maricopa.gov</a></p>	<p><b>Representative</b> District 28 <b>Kelli Butler</b></p> <p>Room #119 (602) 926-5156 <a href="mailto:kbutler@azleg.gov">kbutler@azleg.gov</a></p>	
<p><b>Phoenix City Council Member</b> District 8 <b>Carlos Garcia</b></p> <p>(602) 262-7493 <a href="mailto:council.district.8@phoenix.gov">council.district.8@phoenix.gov</a></p>		<p><b>Representative</b> District 28 <b>Sarah Liguori</b></p> <p>Room #120 (602) 926-3300 <a href="mailto:sliguori@azleg.gov">sliguori@azleg.gov</a></p>	

## **Appendix D – Community Advisory Board Members**

The following table presents a list of the East Central Phoenix Water Quality Assurance Revolving Fund (WQARF) sites Community Advisory Board (CAB) members as of December 2020.

<b>East Central Phoenix WQARF Sites CAB Co-Chairs</b>		
<b>Bernard Schober</b> <a href="mailto:therealklute@gmail.com">therealklute@gmail.com</a>	<b>Vacant</b>	
<b>CAB Members</b>		
<b>Kim van der Veen</b> <a href="mailto:kim@burgeongroup.com">kim@burgeongroup.com</a>	<b>Dr. Ronald Roedel</b> r.roedel@asu.edu	<b>Carol Brady</b> <a href="mailto:carolb51717@gmail.com">carolb51717@gmail.com</a>
<b>John Hathaway</b> <a href="mailto:jhathawayaz@q.com">jhathawayaz@q.com</a>	<b>Thomas Lusk</b> <a href="mailto:thomas.lusk@corgan.com">thomas.lusk@corgan.com</a>	<b>Jolene Morris</b> <a href="mailto:morris_jolene@hotmail.com">morris_jolene@hotmail.com</a>
	<b>Randy Dahl</b> <a href="mailto:rdahl@i-fiberoptics.com">rdahl@i-fiberoptics.com</a>	

## **Appendix E – Prospective Purchaser Agreements**

The following table presents a list of parties that have requested, and received, prospective purchaser agreements from the Arizona Department of Environmental Quality for properties in or around the East Central Phoenix Water Quality Assurance Revolving Fund (WQARF) sites as of January 2022. The table includes WQARF site, purchaser name, property location, the date that public notices for these agreements were issued, and the dates these agreements became effective. There are no prospective purchaser agreements for the East Central Phoenix 40<sup>th</sup> Street and Osborn Road WQARF site.

<b>East Central Phoenix WQARF Site</b>	<b>Purchaser Name</b>	<b>Property Location</b>	<b>Public Notice Date</b>	<b>Effective Date</b>
24th Street and Grand Canal	Cole OF Phoenix AZ, LLC	Northeast corner of Thomas Rd and 24th St., Phoenix AZ	02/03/2009	07/07/2013
32nd Street and Indian School Road	Kaufman Investments, L.L.C.; Naranja Investments, L.L.C.; and RAB Properties, L.L.C.	4027 N. 32nd St., Phoenix, AZ	06/21/2007	06/27/2007
	Kachina Village, L.L.C.	3162 E. Indian School Rd., Phoenix, AZ	12/12/2000	12/12/2000
38th Street and Indian School Road	Gaslight Square Retail L.L.C.	3703 E. Indian School Rd., Phoenix, AZ	01/19/2000	01/19/2000
40th Street and Indian School Road	40th Street & Indian School, L.L.C.	4129 N. 40th St., Phoenix AZ (also described as northeast corner of 40th St. and Indian School Rd. or the Palm Grove Shopping Center)	05/28/1999	05/28/1999
48th Street and Indian School Road	PDG America Properties, L.L.C.	4730 E. Indian School Rd., Phoenix AZ	04/06/2007	04/06/2007

## **Appendix F – Settlements**

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The following table presents a list of parties that have entered into settlements with the Arizona Department of Environmental Quality for properties in or around the East Central Phoenix Water Quality Assurance Revolving Fund (WQARF) sites as of January 2022. The table includes the WQARF site, party name, the date the consent decree was signed by the judge, and the date that public notices for the settlements were issued.

<b>East Central Phoenix WQARF Site</b>	<b>Party Name</b>	<b>Public Notice Date</b>	<b>Date Consent Decree Signed by Judge</b>
32 <sup>nd</sup> Street and Indian School Road	Kachina Village LLC	06/21/2002	06/21/2002
38th Street and Indian School Road	Frank (Yat Yin) and Sue (Woon Shing Wong) Szeto	04/08/1998	04/08/1998
40th Street and Indian School Road	Palm Grove Redevelopers	12/06/1999	12/06/1999
	Herbert M. Potthoff Revocable Trust and Herbert M. Potthoff Revocable Trust for the benefit of Ronald B. Potthoff, Herbert B. Potthoff, II, and Suzanne M. Potthoff	11/30/1999	11/30/1999

## **Appendix G – Media Outlets**

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The following list presents Phoenix media outlets that may be used by the public and Community Advisory Board members to promote information on the East Central Phoenix Water Quality Assurance Revolving Fund sites. The *Arizona Business Gazette* is the external media outlet that the Arizona Department of Environmental Quality uses to publish all public notices related to the sites.

### **A. Newspapers and Magazines**

**Arcadia News** (602) 840-6379  
3850 E. Indian School Rd., Phoenix, AZ 85018

**Arizona Business Gazette** (602) 444-8000  
200 E. Van Buren St., Phoenix, AZ 85004

**The Arizona Republic** (602) 444-8000  
200 E. Van Buren St., Phoenix, AZ 85004

**East Valley Tribune** (480) 898-6500  
1620 W. Fountainhead Pkwy, Ste., 219, Tempe, AZ 85282

**La Voz** (602) 444-3806  
800 N 1st Ave., Phoenix, AZ 85003

### **B. Radio**

**Bonneville International Corporation** (602) 274-6200  
(KTAR-AM/KTAR-FM, KMVP)  
7740 N. 16th St., Ste. 200, Phoenix, AZ 85020

**Entercom/CBS Radio Stations** (602) 452-1000  
(KMLE, KOOL, KALV)  
840 N. Central Ave., Phoenix, AZ 85014

**iHeartMedia Inc.** (602) 374-6000  
(KESZ, KMXP, KZZP, KNIX, KYOT, KFYI-AM, KGME-AM, K229DB/KOY-AM)  
4686 E. Van Buren St., Ste. 300, Phoenix, AZ 85008

## **B. Radio (Continued)**

**Maricopa County Community College District** (480) 833-1122  
(KBAQ, KJZZ)  
2323 W. 14th St., Tempe, AZ 85281

**Hubbard Radio** (602)629-8660  
(K224CJ/KAZG-AM, KDKB, KDUS-AM, KSLX, KUPD)  
1100 N. 52<sup>nd</sup> St. Phoenix, AZ 85008

**Riviera Broadcasting Co.** (602) 648-9800  
(KKFR, KMVA, KOAI)  
4745 N. 7th St, Ste. 410, Phoenix, AZ 85014

**Sierra H. Broadcasting, Inc.** (480) 994-9100  
(KAJM, KNRJ)  
1710 E. Indian School Rd, Ste. 205, Phoenix, AZ 85016

**Univision Communications, Inc.** (602) 243-3333  
(KHOT, KHOV, KOMR, KQMR)  
6006 S 30<sup>th</sup> St. Phoenix, AZ 85042

## **C. Television**

**KAET Channel 8 (PBS)** (480) 965-3506  
555 N. Central Ave., Ste. 500, Phoenix, AZ 85004

**KNXV Channel 15 (ABC)** (602) 273-1500  
515 N. 44th St., Phoenix, AZ 85008

**KPHO Channel 5 (CBS)** (602) 207-3333  
5555 N. 7<sup>th</sup> Ave., Phoenix, AZ 85013

**KPNX Channel 12 (NBC)** (602) 257-1212  
200 E. Van Buren St., Phoenix, AZ 85004

**KSAZ Channel 10 (FOX)** (602) 257-1234  
511 W. Adams St., Phoenix, AZ 85003

**KTAZ Channel 39 (Telemundo)** (602) 648-3900  
4625 S. 33rd Pl., Phoenix, AZ 85040

**KTVW Channel 33 (Univision)** (602) 243-3333  
6006 S. 30th St., Phoenix, AZ 85042

## **Appendix H – Related Agencies and Contact Information**

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The following list presents additional resources that may be used by the public and Community Advisory Board members to address concerns or questions related to the East Central Phoenix Water Quality Assurance Revolving Fund sites.

### **A. State of Arizona**

#### **Arizona Department of Agriculture**

1688 W. Adams St.  
Phoenix, AZ 85007  
Phone: (602) 542-4373

#### **Arizona Department of Health Services**

150 N. 18th Ave.  
Phoenix, AZ 85007  
Phone: (602) 542-1025

#### **Arizona Department of Water Resources Groundwater Permitting and Wells Section**

110 W. Washington St, Suite 310  
Phoenix, AZ 85007  
Phone: (602) 771-8500

### **B. City of Phoenix**

#### **City of Phoenix Environmental Programs**

200 W. Washington St., 14<sup>th</sup> Floor  
Phoenix, AZ 85003  
Phone: (602) 256-5669

#### **City of Phoenix Water Services Department**

200 W. Washington St Phoenix, AZ 85003  
Phone: (602) 262-6251

#### **Public Works Department**

Garbage and Recycling  
200 W. Washington St., 7<sup>th</sup> Floor  
Phoenix, AZ 85003  
Phone: (602) 262-7251

## **C. Other**

### **Agency for Toxic Substances and Disease Registry**

Western Branch – Region 9

75 Hawthorne St.

Suite 100, M/S:HHS-1

San Francisco, CA 94105

Phone: (800) 232-4636

Consumer Information Line: (800) 223-0618

### **Real Estate Seller Disclosures**

Arizona Association of Realtors

255 East Osborn Road

Phoenix, AZ 85012

Phone: (602) 24-7787

<http://www.aaronline.com/wp-content/uploads/2017/01/Residential-Sellers-Property-Disclosure-Statement-SPDS REV 01Oct2017.pdf>

### **Salt River Project**

1500 N Mill Ave

Tempe, AZ 85281

Phone: (602)-236-3333 (water customer service)

<http://www.srpnet.com/contactus/default.aspx>

## **Acronyms and Glossary of Terms**

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**1,1-Dichloroethane (1,1-DCA):** A colorless, oily liquid with a sweet odor. Typically, it is an intermediate product in the manufacture of 1,1,1-trichloroethane (1,1,1-TCA), and to a lesser extent vinyl chloride and high vacuum rubber. In the past it was used as a surgical anesthetic. It evaporates easily at room temperature and burns easily. It does not occur naturally in the environment.

**1,1-Dichloroethene (1,1-DCE):** A colorless liquid with a sharp odor that is used to make certain plastics, packaging materials, and flame-retardant coatings. Typically, it is a degradation product of other chlorinated solvents.

**Air Sparge:** An in-situ treatment technology that uses injected air to help remove harmful vapors from polluted soil and groundwater below the water table by injecting air directly into the saturated subsurface to encourage the solvents and gasoline to evaporate faster, which makes them easier to remove with a vacuum.

**Aquifer:** An underground rock formation composed of such materials as sand, soil, or gravel that can store groundwater and supply it to wells and springs. In aquifers, groundwater occurs in sufficient quantities to be used for drinking water, irrigation, and other purposes.

**Aquifer Water Quality Standards (AWQS):** State of Arizona maximum levels for contaminants that apply to groundwater in aquifers designated for drinking water use. For example, the AWQS level for tetrachloroethene (PCE) is 5 micrograms per liter ( $\mu\text{g/L}$ ).

**Arizona Administrative Code (A.A.C.):** The A.A.C. is where the official rules of the State of Arizona are published. The *Code* is the official compilation of rules that govern state agencies, boards, and commissions.

**Arizona Department of Environmental Quality (ADEQ):** ADEQ is the executive agency of the Arizona State Government mandated to enforce and administer the State's environmental laws and regulations.

**Arizona Revised Statutes (A.R.S.):** State laws adopted by the Arizona State Legislature.

***cis*-1,2-Dichloroethene (*cis*-1,2-DCE):** An odorless organic liquid that has two slightly different forms, a "cis" form and a "trans" form. Both the cis and trans forms (typically as a mixture) are used as a solvent for waxes and resins; in the extraction of rubber; as a refrigerant; in the manufacture of pharmaceuticals and artificial pearls; in the extraction of oils and fats from fish and meat; and in making other organics.

**Cleanup:** Actions taken that deal with a release or threat of a release of hazardous substances that could adversely affect public health and/or the environment. The word "cleanup" is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, remediation, or corrective action.

**Community Advisory Board (CAB):** A diverse group of community members interested in or affected by the presence of a Water Quality Assurance Revolving Fund (WQARF) site. By statute, ADEQ is required to form a CAB for each WQARF Registry site where ADEQ is initiating a Remedial Investigation. ADEQ seeks the CAB's input in the decision-making process and works with them from the onset of the Remedial Investigation/Feasibility Study process until the requirements of the Record of Decision have been fulfilled.

**Community Involvement Area:** The mailing area of residences and businesses used in the notification for public meetings and other written notices regarding a site.

**Community Involvement Coordinator:** The ADEQ employee responsible for ensuring that all statutes and rules related to the involvement of the public and public outreach at WQARF sites are upheld and complied with by ADEQ. Community involvement coordinators manage and coordinate the work of CABs for WQARF sites.

**Community Involvement Plan (CIP):** A document that identifies techniques used by ADEQ and the U.S. Environmental Protection Agency to communicate effectively with the public during the cleanup process at a specific site. The CIP describes the site history, nature and history of community involvement, and concerns expressed during community interviews. In addition, the plan outlines methodologies and timing for continued interaction between the regulatory agencies and the public at the site.

**Cone Penetrometer Testing (CPT):** A testing method used to determine the geotechnical engineering property of soils.

**Contamination:** Any hazardous or regulated substance released into the environment.

**Contaminant:** Any physical, chemical, biological, or radiological substance or matter present in any media at concentrations that may result in adverse effects on air, water, or soil. A harmful or hazardous matter introduced into the environment that is not normally found there, or not naturally occurring.

**Early Response Action (ERA):** Refers to a remedial action performed prior to the final remedy, and often prior to the Remedial Investigation. An ERA addresses current risks to public health, welfare, and the environment; protects or provides a supply of water; addresses sources of contamination; or controls or contains contamination where such actions are expected to reduce the scope or cost of the remedy needed at the site. Also referred to as an Interim Remedial Action.

**Feasibility Study (FS):** A process to identify a reference remedy and alternative remedies that appear to be capable of achieving the Remedial Objectives for the site. It is often done as part of a two-phase investigation in conjunction with a Remedial Investigation.

**Granular Activated Carbon (GAC):** Treatment process used to remove dissolved contaminants from water by absorption.

**Groundwater:** Water located beneath the ground surface in soil pore spaces and in the fractures of geologic formations. A formation of rock or soil is called an aquifer when it can yield a usable quantity of water.

**Hazardous Substance:** Any material that, because of its quantity, concentration, physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.

**Information Repository:** A collection of documents about a specific site. Information on certain WQARF and Superfund sites may be available at ADEQ offices and libraries throughout the state.

**Interim Remedial Action (IRA):** An interim measure to remove or isolate contamination. This action can be taken at any time during the Superfund/WQARF process and is usually taken to protect people and the environment from high levels of contamination until the final Remedial Action can be taken.

**In-Situ Chemical Oxidation (ISCO):** In-site chemical oxidation, a form of advanced oxidation processes and advanced oxidation technology, is an environmental remediation technique used for soil and/or groundwater remediation to reduce the concentrations of targeted environmental contaminants to acceptable levels. The method involves injecting or otherwise introducing strong chemical oxidants directly into the contaminated medium (soil or groundwater) to destroy chemical contaminants in place.

**Interim Remedial Action (IRA):** An interim measure to remove or isolate contamination. This action can be taken at any time during the Superfund/WQARF process and is usually taken to protect people and the environment from high levels of contamination until the final Remedial Action can be taken.

**Information Repository:** The location where a collection of documents about a specific project is stored. Information on certain WQARF and Superfund sites may be available at ADEQ offices and libraries throughout the state.

**Monitoring Wells (Monitor Wells):** Wells installed for the purpose of collecting samples such as groundwater and soil vapor. Analytical results from samples are used to characterize the extent of contamination, the direction of groundwater flow, and the types and quantities of contaminants present in the groundwater.

**Operation and Maintenance (O&M):** 1. Activities conducted after a WQARF/Superfund site action is completed to ensure that the action is effective. 2. Actions taken after construction to ensure that facilities constructed to treat wastewater will be properly operated and maintained to achieve normative efficiency levels and prescribed effluent limitations in an optimum manner. 3. Ongoing asbestos management plan in a school or other public building, including regular inspections, various methods of maintaining asbestos in place, and removal when necessary.

**Plume:** A well-defined area of contamination in groundwater, soil, or the air often used to describe the dispersion of contamination in soil and/or groundwater.

**Potentially Responsible Parties (PRPs):** Those parties (individuals, corporations) identified by state or federal authorities as potentially liable for cleanup costs at a contaminated site.

**Preliminary Investigation (PI):** The process of collecting and reviewing available information about a known or suspected hazardous waste site or release.

**Proposed Remedial Action Plan (PRAP):** A document that reviews the cleanup alternatives presented in the site Feasibility Study and identifies ADEQ's preferred alternative. Selection of a preferred alternative is not a closed-end commitment to use that alternative; rather, it is a way for the agency to indicate, based on experience and expertise, which alternative is the most likely course of action. ADEQ must actively solicit public review of and comment on all the alternatives under consideration.

**Public Comment Period:** A period during which the public can formally review and comment on various documents and ADEQ actions.

**Record of Decision (ROD):** A legal document that announces and explains the cleanup methods ADEQ will use at a Superfund/WQARF site. The Record of Decision is based on information and technical analysis generated during the Remedial Investigation and Feasibility Study, and on consideration of comments received during the public comment record for the Proposed Remedial Action Plan.

**Remedial Action (RA):** Any action taken to investigate, monitor, assess and evaluate the release or threat of release of hazardous substances or contaminants to the environment. It may also refer to the actual "cleanup" of the environment by various removal, treatment, monitored remediation, or corrective actions. The term cleanup is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, remediation, or corrective action.

**Remedial Investigation (RI):** Establishes the nature and extent of the contamination and the sources; identifies current and potential impacts to public health, welfare, and the environment; identifies current and reasonably foreseeable uses of land and waters of the state; and obtains and evaluates any information necessary for identification and comparison of alternative RAs.

**Remedial Objective (RO):** Established remedial goals for the current and reasonably foreseeable uses of lands and waters of the state that have been or are threatened to be affected by a release of hazardous substance.

**Remediation:** Cleanup or other methods used to remove or contain a toxic spill or hazardous materials.

**Remedy:** Cleanup method chosen for a site.

**Responsible Party:** An individual or company (e.g., an owner, operator, transporter, or generator of hazardous waste) that is responsible for the contamination problems at a Superfund/WQARF site. Whenever possible, responsible parties are required to clean up hazardous waste sites they have contaminated.

**Responsiveness Summary:** A summary of oral and written comments (and ADEQ responses to those comments) received during the public comment period.

**Soil Vapor Extraction (SVE):** SVE systems remove contaminant vapors from below ground for treatment above ground. SVE systems remove vapors from the soil above the water table by applying a vacuum to pull the vapors out. The method is used for chemicals that evaporate easily, such as those found in solvents and gasoline.

**Superfund:** The program operated under the legislative authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act that funds and carries out solid waste emergency and long-term removal and remedial activities. These activities include establishing the National Priorities List, investigating sites for inclusion on the list, determining their priority, and conducting and/or supervising cleanup and other remedial actions. It provides for the cleanup of hazardous substances released into the environment, regardless of fault. The term Superfund also is used to refer to cleanup programs designed and conducted under CERCLA and its subsequent amendments.

**Tetrachloroethene or Tetrachloroethylene or Perchloroethene (PCE):** A clear, colorless, liquid with a chloroform or sweet odor and a low boiling point; a solvent used for dry cleaning; degreasing and drying metals and other solids; dissolving waxes, greases, oils, fats, and gums, and in other industrial applications. PCE is a potential occupational carcinogen. Evaporation of PCE increases as temperature increases.

**Trichloroethene or Trichloroethylene (TCE):** A colorless liquid used as a solvent, metal degreasing agent, and in other industrial applications.

**Vinyl Chloride:** A colorless compound used in aerosol spray propellant, furniture and automobile upholstery, wall coverings, housewares, automotive parts, and as a refrigerant. It is a chemical intermediate, not a final product.

**Volatile Organic Compounds (VOC):** A large group of carbon-containing compounds that are easily dissolved into water, soil, or the atmosphere and evaporate readily at room temperature. Examples of VOCs include PCE, TCE, benzene, toluene, ethylbenzene, and xylene. These contaminants are typically generated from metal degreasing, printed circuit board cleaning, gasoline, and wood preserving processes.

**Water Quality Assurance Revolving Fund (WQARF):** Also known as the State Superfund, WQARF is the program and funding used to address hazardous substance releases within the state that are not covered by other specific programs.